Faculty for Education of the Executives
University of Business Academy, Novi Sad (Serbia)

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"Application of New Technologies in Management"

ANTiM 2009

PROCEEDINGS

Volume 2

Editors:
Života Radosavljević
Predrag Dašić

08 - 11. February 2009,
Vrnjačka Banja, Serbia

FACULTY FOR EDUCATION OF THE EXECUTIVES
UNIVERSITY OF BUSINESS ACADEMY
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TOYOTA

PREFACE

The man from its beginning to today sought to increase his performance. One of the ways to increase personal, and team work is the creation and use of various tools. Man has transferred on working tools executive functions, because that tools and technology more efficiently perform the tasks then the man himself.

So there was the phenomenon of technologies that are being applied in the corporate business. This term in the classical sense, related to matter and energy, as the first of two required components of each organization and includes part of the production process in which the technological process of turning raw materials into new products, or services. Transfer of operational and executive work of the mechanisms, the man has increased performance of translation of matter and energy in the products or services, or products with as little consuming as possible.

However, the broader aspect of the phenomenon is related to technology and the third required component of every organization, and to the information. Disclosure of information as an important component, without which there is no organization, is jeopardized classic organization and explanation of the causes of certain conditions, phenomena and processes. Therefore, the broader aspect of technology in addition to instruments with which to transform matter and energy into products and services, including technology related information, and instruments and techniques that translate data into information, information to knowledge, and knowledge to wisdom. Thus understanding of new technologies, in addition to production, and include organizational tools and techniques, such as technical design, construction and management organizations, such as creative techniques of creativity, re-engineering, benchmarking, total quality system, operational research, team work, etc.

One and other technologies to the corporate level should be seen in the mutual causal consequence connections and relations. Each of them have some common, and the special characteristics, which management must diagnose and to adequately manage them. Research has shown that the application of production technology in the corporate business is more applied, while the technology related to the management processes is marginalized, which brings into question the efficiency and production technologies. Should bear in mind that technology is not a goal, but the performance, or to the introduction of information technology is not a goal, but it is information. Pursuant to the above, technology is a mean for more successful achievement of set goals.

Bearing in mind, the International Conference entitled "Application of new technologies in management" has set ambitious aims to clarify the problem of application of new (production and management) technology in the corporate management. The legality of which is to come in the research, analysis and contributions to the conference by the principle of "creative imitation" can be used in corporate, but also at the national or global level, which gives them a universal character.

Conference programming commitment is derived from the evinced problems that occur primarily at the corporate levels of different activities and different countries, and can be seen from the following:

- Shows that the new technology is mainly applied in the developed countries, while the same did not find their application in countries in developing and countries in transition.
- It is evident that the production technology applied in the production - processing sector, while their use is marginalized in tertiary sector, which today is the biggest part of the economy of developed countries.
- New technologies have been applied mainly in the operational executive, production and service processes, while their lack of application is shown in the management.
- New technologies are the most applied to the lowest level of management, or in the manager, brigadier, manager, supervisors and managers in other names,
- As more stairs is in a hierarchical pyramid, the application of new, first of all the information and organizational technology is less, to the level of top management was largely marginalized.

Specified directly reflects on the reduction of corporate performance. In other words, companies that apply new technologies in their work are usually competitive and achieve greater corporate performance. It is concluded that the problem of insufficient use of new technologies, especially information, often is not in the financial resources, but in the resistance to newspapers and novelties. This is especially true in countries in transition, where there is no professionalized, but ideologically management which usually does not have certificates for management of business and other systems.

The aim of the conference is to emphasize the necessity of application of new technologies primarily in the management profession in the corporate-type organizations. Companies must understand that no matter what the job is dealing with, that will depend on the speed and quality of information, and that the information as a third required component of the organization may be the implementation of the new, especially information technologies. These technologies provide a quick transfer, storage and use of information.

Bearing in mind, works in the Proceedings of International Conference entitled: "Application of new technologies in management" is to clarify the problems and propose solutions to the problems and controversy is

successfully resolved. In the above must bear in mind that the introduction of new, especially information technology, strategic changes that need to be followed by organizational changes in terms of organization reengineering and establishment of new relations and connections between parts within the system, but also between the system and environment.
Shows that the corporate organization and after the introduction of the Internet still remains deeply structured, with a strong hierarchical divisions and a high level of determinism that makes life and work in the conditions of the so-called "revolutionary" changes. This led and leads to the paradox that the information technology, and after their introduction does not give satisfactory results, due to restrictions imposed classic organizational structure.
The first international conference entitled "Application of new technologies in management" is the initial step in the research in this area which creates a basis for further consideration of this issue in the developed, but primarily in the transition countries, which have specific social and economic environment. However, in the above, special emphasis will be given to Serbia as a country in transition.
Faculty for Education of the Executives in Novi Sad has formed a research team, which should round research on the topic of "Holistic system concept - the new paradigm in business organization." We believe that the results of this research contribute to the clearing issues that are considered the first international conference.
This year's First International Conference in its Proceedings publishes over 110 scientific and professional papers on the topic of the Conference.

Vrnjačka Banja, February, 2009.

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Predrag Dašić, prof.

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BENCHMARKING AS ORGANIZATIONAL TECHNOLOGY IN MODERN MANAGEMENT

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Summary: *Modern management concept is completed with a new technique to promote business, and that is benchmarking. Benchmarking by it's notional definition presents a systematic and continuous process of measurement and comparison of your own business, and transactions of leaders in a particular area in order to get information to improve your performance (American Center for Productivity and Quality). Benchmarking is therefore, a method for creative "imitation" and learning from the experiences of others. The main instrument in benchmarking is comparison and research, so it receives characteristics of statistical techniques for determining the specific situation, aspect and processes. However, careful use is required by differences in the cultural, sociological, technological, religious microenvironment which inevitably draws the need for not just blind copying of best practices, but defining the application model, which will be in accordance with the local specification. The aim of this paper is to point out the opportunities and problems in the implementation of benchmarking as an up-to-date organization technology in the business systems management.*

Keywords: *benchmarking, management*

1. THE NEED FOR BENCHMARKING

Determining the need for benchmarking is one of the major issues in the strategy of company management. From this issue's response, to a large extent depends the performance of the application of the best solutions. This is natural, because the manufacture and market of any business system will not be increased only by intensification of production, but above all by development of feeling and the need for using the product-services that we offer to the market (consumer). When you create a need, or motive, then reflexively we receive interaction to the research practices of others, as a possible sources of knowledge of improving your own opportunities and better utilization of resources. The best way to ensure business fortune, is for the business systems to design your future and secure you from risk, and benchmarking is a relatively reliable technique in doing that. If they do not do it by themselves, others will determine their future, and it will often not be in accordance with certain organizations. Management of each system must have in mind that "failure usually comes from the top". Those who are engaged in formulating objectives, policies and strategies are responsible for the company's failure. Many branches that are found in the collapse were more oriented to internal than external problems, more to products than customers, neglecting other's practice and the best solutions for particular issues [1].
According to Harrington companies use benchmarking for the following reasons:

- setting challenging, and at the same time practicable realistic goals
- defining how these goals can be achieved
- defining the differences between company's business and business of competitor companies
- development requires competitiveness
- company loses the market share and requires a shift in business
- costs per employee are too high
- quality of competition is much better
- competition gets the product to the market in a shorter period of time
- to test the strategy of the company
- the administration feels that it is necessary to encourage innovations in the company
- to define the strategy of competitors in the future and sources of investment

- because the company needed new ideas
- because the Malcolm Baldrige award for the quality requires the implementation of benchmarking
- to find out where the company is located in relation to the best in the world
- to identify the necessary development goals
- to identify weaknesses and strength of the company
- to help the administration to manage the development efforts
- to discover the new procedures and technologies
- to improve the level of satisfaction of creditors
- to learn from the experience of international companies
- to ensure the possibility of timely reaction when it is understood that the company started to lag behind the others [1].

The reason why benchmarking has become so popular lies in the fact that today, in the world rich with information available to the public, more than ever the vast amount of data is available on the best companies and their business.

Another important reason is that the **Malcolm Baldrige** international award for quality requires the implementation of benchmarking [1].

U.S. Ministry of Trade has established the Malcolm Baldrige reward for the quality, as an incentive to American industry to increase their competitiveness and improve quality as an important element of competitiveness. The award was named after the former U.S. Minister of Trade, and it represented a gold medallion in a high piece of crystal.

As pointed out by Bounds, Yorkshire, Adams and Rannez the main requirements of the award are:

- focusing on consumers
- efficient management
- great systems of collection, analysis and use of information
- long-term development of quality
- navigation on the development of human resources
- the use of different indicators of the accomplished.

These requirements are related to the industrial and the non-industrial activities, including health, government agencies, and educational institutions. Results of the post in the seven categories that are rated. Candidates must provide information about the implemented improvements in the company and the results of business in an adequate way, in order for them to be applied by other companies.

2. TYPES OF BENCHMARKING

The role of administration is to continually encourage comparisons with the best. Generally looking at the basics of benchmarking process, there are the following five questions and answers to them: What should be benchmarked? Who should be benchmarked? How do we manage the process? How do they manage the process? Which of it is possible to be implemented with us?

Usually subjects to the benchmarking process are:

a) Products and services. Finished products and services that are offered on the market to the end customers are a common subject to the benchmarking process. Finished products are often observed in their retail stage, and not in the stage of production. These products and services are immediately available for analysis, although some products and services (aircraft, computers, armed systems) are not easily available for analysis. Benchmarking of products and services is often subject to competitive analysis. Therefore, when you consider this type of benchmarking process, many doubt the difference between benchmarking and traditional techniques of competitive analysis. In this case, these two activities have much in common, especially when they focus on the direct competitors [5].

b) Work processes. Work processes are often subjected to benchmarking process in order to establish and understand business processes, manufacturing processes, design of workplaces, equipment used in the production and testing, working methods, the use of specific technology, distribution, etc. It is interesting that in this case, for the needs of the analysis, we take the organizations that have a good reputation but do not have to be from the same industry, or do not have to be competitive.. Interest for the analysis of these companies comes from the fact that an excellent business process produces outstanding products and services and it is practically usable in any branch of industry in which it is applied. Research fields in this case include activities by the employees, for example finance, human resources, marketing, service. Although this type of benchmarking is identical to the type of benchmarking which refers to products and services, some companies make the difference between product research and process research that have a direct impact on internal users. c) Organizational achievements. Organizational achievements include the results which define the fundamental success of the company: the costs and income. Also, other parameters can be a subject of benchmarking process:

profit, cost of capital, turnover, assets, indicators of production and quality. d) Strategy. Some companies use projects of business and functional strategies as a subject for benchmarking, in order to understand the way certain companies gain competitive advantage.

3. BENCHMARKING PHASES

It should be emphasized that the management process as any other processes, are developed by a particular order and algorithms. Each of these principles can be "partially formalized and according to that shown and explained as a technical practicability of their development in each case. Technical practicability is one of the most important characteristics of each trade, or profession, and according to that, the management profession'' [8]. Since Management is oriented to making managerial decisions, it comes that making managerial decisions has its own techniques and technologies, principles and algorithms, and order that must be followed. Establishment and formalizing the order and the rules of making managerial decisions takes the characteristics of technological systems. Technological practicability in the management implies that the same must eliminate determinism, since it is a dynamic activity and the system, which is in every other dimension of time changed and gets new features and characteristics.

Regardless of the diversity of techniques and technology of benchmarking, practice has differenced these six stages [6]:

1. *Identifying the processes that will be compared.* In order for benchmarking to be successful a good preparation is required. First we must select a process that will be compared, and then the process must be analyzed in detail and its performance must be measured. If we enter the process of benchmarking does without a clear picture of our own process, we will not know what we should look at organizations that we compare ourselves with.

It's good to determine the team that will map the process and determine all the indicators on the basis of which can the performance of the process be measured, in order to request these same indicators in the standards with which comparisons are made. Usually, the processes are measured and compared in costs and productivity, cycle time, value added and similar. Processes that can be compared within a single function (for example, the selection of employees in the management of human resources), inter-functional (for example, the introduction of new products), management processes (planning, organizing, control) and the processes within the organization.

2. Identifying the organizations with which the comparison is done. The choice of partners that we will make the comparison with is very important. In principle, there are three types of benchmarking, according to with whom we are comparing: a) Internal Benchmarking. In this situation, comparisons are made between the same process that is carried out in two or more sectors or functions in the same company. For example, how the process of evaluation of the performance of employees in different sectors, or how the process of inventory management is carried out in two divisions of a company. Example of this type of benchmarking are services for post selling activities or in the postal mail system, or, bank's branches in the one bank system. There is also comparison of the best organization in the system with the rest of them. b) Competitive benchmarking. In it, we do the comparison with our competitors' processes, which are by performance above us. Besides, we should bear in mind that the selection of the best organizations for comparison is performed depending on which process is selected for benchmarking, since no one is the best in everything, but each does some in best way. For example, tourist centers with the best examples of top tourist offer are considered to be Dubai, Qatar, Kuwait, Hong Kong. Dubai particularly stands out, and interesting is the fact that it is a desert in which a new world is created (from closed ski resorts, artificial islands, most luxurious hotel in the world). To us, I mean in Serbia, this says we that should be turned to innovation and building, and not just the marketing the tourist offer as "untouched nature + organic food + health tourism ..." (We have a very good example - Kusturica's Mokra Gora). Therefore, strategies such as the tourist development of Serbia must integrate three things : existing resources (historical, spa, natural, and culinary) innovative construction (the so-called "creating attractions" that use existing resources) and the low prices of tourist services. c) Functional Benchmarking. In this case we compare the process in our organization with the best example of this process performed by some other organization that is located in another branch. For example, a sugar refinery compares their storage management process with the same process in an excellent cement plant. Regardless of the type of benchmarking, the most important is that the selected partner is the leader in the observed process. It is, however, very important that the process requires a measure of reality to reach models.

Further on we explain the examples of benchmarking, which are considered the best in the business practice:

COMPANY	**PROCESS**
American Airlines	Information systems
Benetton	Propaganda
General Electric	Management process

Hewlett-Packard	Realization of customers orders
Marion Merrell Dow	Sales management
Ritz-Carlton	Training
Honda	New products development

3. *Data collecting.* Data required for benchmarking can be collected in a variety of ways. The best way is, of course, visiting the company to which we compare ourselves and the acquisition of primary data from them. Such visits must be very well planned, in order to get the most from them. During the visit, the data is collected by obtaining documentation, interviews, and observations. However, direct provision of data sometimes is not possible. Most often, due to the rejection of the company to which we'd like to compare ourselves. However, in that case, it is also possible to get to data on the processes that we are interested in, but from secondary sources. These are the different articles, case studies, books, reports in the media, speeches of the leaders of these organizations, and similar. Excellent companies are often in the focus of journalists and researchers, and there is a lot of material about them. We can achieve a lot by systematic collection and processing of these materials. This step should certainly be done even if we have the opportunity to visit the company. In that case, it is an excellent preparation for the visit itself.
4. *Data processing and determination of the gap that exists between your own and the best process.* In this phase is the analysis of the collected data and we come up with ideas on how some solutions of the competitor or the best examples could be applied. We can never fully copy out someone's solution for the process, and it would also be dangerous to do. There are no two same organizations and literal transfer of other's experience is not good. At this stage, we come to the *"creative imitation"* that brought the Japanese companies to the number one position of in many markets.
5. *Making an action plan.* When the solution found, it is developed through the plan of action to improve the process.
6. *The implementation plan of action and monitoring the process*. Planned improvement of the process is carried out, and then the performance is measured. If we need to, we enter in a new benchmarking process.
Benchmarking goes much further than the traditional analysis of competition. It identifies the processes and products that should be improved.
Another very important feature as far as benchmarking, is that it requires taking a certain threshold will, which is very important. This organizational will threshold is itself a key Benchmarking factor. Companies that have not been able to collect strength and compare themselves with the best, are not yet ready to implement approaches to quality, no matter how simple they were. If benchmarking was run as an effort to the implementation of any specific approach to quality, in the first phase it demonstrates the necessary will or its absence. Benchmarking is a dynamic system that continues in any approach to quality. Companies evaluate their performance on the selected approach to quality, as opposed to the success of the best companies that apply this approach.

4. BENCHMARKING EFFECTS

There are different typologies of benchmarking, that is, different criteria by which this technique can be applied. Also, different ways of benchmarking technologies are present. However all the benchmarking technologies are, according to Garvin, more or less oriented to a "process that started detailed research best organization in which benchmarking will be implemented, continues to research their own practice and performance, developed by visiting the scene, and research methods, and ends with analysis of the results, giving recommendations and implementation".
Analysis showed that there is widespread interest in the benchmarking. It is difficult to precisely determine the level to which this interest translates into actual activity of benchmarking. Some companies have established separate organizational units for dealing with benchmarking. Recent studies on benchmarking showed that about 78% of successful companies used benchmarking. It should also be noted that the production companies took more studies on benchmarking, than the service companies. This is understandable, because the primary sectors by its nature are similar, while the services are very divergent and difficult to compare.
A special problem with services is the diversity of cultural and sociological milieu in which the services are, so that good practice in one cultural milieu, not showing good results in the second cultural sociological area. The essence of benchmarking in the business systems is that it must listen the environment and continuously adapt to the environment.
The company must strive to be the best in this area. Being the best is a big problem, because it is often easier to take first place, than to keep it. However, leadership allows: the spread of the market, and thereby the profit, greater satisfaction with internal entities in the company, higher ratings of management, greater recognition, with which comes the power of the company.

Business systems must continuously make benchmarking processes. This is not one, but a number of benchmark processes and continual research for the best solutions in practice. After a committed benchmarking, the company often becomes redesigned and often works on a completely different basis than before.
Benchmarking creates virtual corporations, whose primary characteristics is to live with the constant changes. In virtual corporations everything changes, only the changes are constant, which imposes new requirements and challenges to top management. Global changes in the business after conducting the benchmarking project are the following [5]:

Before Benchmarking	After benchmarking
non- inventiveness;	the use of every good idea;
only one possible solution;	larger number of alternatives;
accent on the internal;	accent on the external;
goals from the past;	best goals;
poor understanding of the market;	good understanding of the market;
internal priorities;	priorities of consumers;
we are good;	we should be better;
management according to experience;	management by facts;
follow others from their branch;	leaders in their branch;

Companies that use benchmarking can be described as proactive, externally focused and close to market. They have innovational access to creating ideas and in the upgrade of the established best practice. As such, they are ready for radical ideas and great quality jumps in their work. Benchmarking is often used for the evaluation of the state of market and estimates of market potential. It is at the same time also, one of the best sources of business ideas, and those ideas that are confirmed in practice of competition or similar companies. *Benchmarking is actually learning from the experience of others, while which we should have in mind that other's knowledge and experience are the cheapest.* The most expensive is the learning in your company and within your own mistakes, which is why wise managers accept benchmarking.
The company, which tends to best practice may not achieved it, because the place is reserved only for one. However, the aspiration to be the best leads employees and management in the situation to be challenging, near the leaders, with the ability to take over leadership positions. In benchmarking, we should want leadership positions, which are a prerequisite for performance.
Benchmarking is particularly useful when employees suspect that they can not do something, and that management requirements are not realistic. Irrational belief is opposed to the current and best practice that is confirmed and verified by the market. Each situation has its threats and opportunities, and whether it will be used or not, depends primarily of strategic management, but also the employees. Companies that do not accept, or not practice benchmarking are internally focused, without clear ideas about their capabilities and weaknesses, with a reactive approach to competition. They do not know the situation on the market and consumer demands. As such, they are non innovative and are usually followers of certain events in the market.
Empirical research done by the Mann group in 1998 on the example of the 138 companies that are engaged in distribution of electrical products. Their research suggests that "comparisons with the partners and knowledge of the best experiences really contribute, together with the determination of goals and results assessment, the overall efficiency of the company. Similar conclusions gave Voss and group in 1997, in the analysis of European manufacturers of sites, and on the example of 600 respondents" [2].

5. BENCHMARKING CRITICS

Benchmarking also suffers certain critics. Critics are often related to <u>mechanical transmission</u> of others' experience, not considering the diversity of sociological cultural, and technology, conventional, religious or other factors. Therefore, many solutions in one cultural sociological milieu can not be qualitatively transferred to another culture, customs, and mentality.
Another problem relates to the difficulties in the research of best practices, given that many companies try to conceal the ways that have led to leadership positions, and many times to place false information in order to jealous keeping the leadership positions. So that occasionally, it is necessary to several times verify the data obtained and practically do the "industrial espionage".
Mentioned criticism should not be underestimated, but practice shows that they are the result of insufficient preparedness or lack of experience in it's implementation. Benchmarking studies have shown that it is a very effective management technique, because it often requires a small financial investment, and on the other hand contributes to achieving greater efficiency and effectiveness. The idea of benchmarking is perhaps best summarized in the Japanese term "dantotsu" which means an attempt to become the best among the best.
Errors in the implementation of benchmarking appear in organizations that are pleased with the fact that each year, they make a small shift in comparison to the previous year, instead of striving to equality with the best - the

comparison is made only by our own benchmarking results and last year lost its basic meaning. You should also avoid the application of benchmarking first to the best features in the organization - it is applied first to the weakest functions because the potential improvements that will be the largest [3].

6. CONCLUSION

The essence of benchmarking is the detection of the best ways to achieve results and the implementation of the "how" in your own way of working and thinking, which should be regarded as a continuous process of comparison of products, services and processes with best practices in this area.
Benchmarking should be understood as a process that has several stages, it's carriers and deadlines, in turn, it will be in the list of good wishes, without more serious prospect for the realization. It should be regarded as a measuring process in establishing comparative performance. It describes how to reach the exceptional performance and allows for the implementation of best practices.
Companies that have not been able to collect the strength and compare themselves with the best, are not yet ready to implement approaches to quality, no matter how simple they were.

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MANAGEMENT AND NEW TECHNOLOGIES IN FRONT OF THE CHALLENGES OF GLOBAL ECONOMY CRISIS

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Summary: *Analyse of causes that brought and defining of roads of leaving the economy crisis where was the modern world already, necessarily must include the question of position, strategy and perspective of management. The very definition of management as the managing process of productive and labor processes, ot optimal connecting machines and creative energy od human work, and managers as specific social group, speaks about it and they have one part of reponsability for crisis where falls modern world and potential energy that can provide for global economy to come out of crisis and enters again in phase of prosperity. Nowdays many, as in our country, and in others, considerable part of the blame for crisis appearance and unemployness as its invisible and the most drastic social-economy concequance blaim management. In the same time they expect for management to with their proffesional skills and knowledges stop the growing crisis flow and reemploy business and producing capacities.*

Key words: *new technologies, management, economic crisies, globalisation, employment, market, profesional knowledge and skills, science*

1. INTRODUCTION

„Ante portas“ crisis. This paraphrase of oldroman sentence that announce arrival of great danger, unfortunately does not respond with reality. Reality is much more worse. Crisis has already entered into our economies, policy, our factories, institutions, houses, it became part of our everday life. Everybody are worried, and mostly, the members of labor world were afraid, fearing for their and exsistence of their families. That fear encourages and fares-up only one word that is used more and more often in expert economy analysis, in political speeches, in everyday ommunication – recession, or fall of economic activity [2]. Of course, it is nott only about one word, but the facts of goods accumulations on the market, fall of population purchasing power, fall of credit systems, and first of all aparments lending and permanent nondurables, forced vacations, production reduction, discharching of the workers. Medias everyday inform regarding temporary production stoppage and factories closing all over the planet. It ment that everyday more and more of employed peole sayed without jobs and livelihood.

Economy crisis is not new nor the first. Capitalist tarde manner of production confronts with crisis from its first steps. Thereat, continually growe their intensity and concequences, and therefore every next by economic, social, political and all other concequences were more difficullt than the prevous one. The reasons should not be specialy explained why the crisis was the subject of intrests for the politicians, scientists, business man, unions in previous century, specialy from the so called time of „Great depression“, in the thirties, that by its flow and concequences changed the flow of the history and flow of modern civilisation. These reasons are crealy visiable and noticable on the phenomenal plane. The thrities' of XX century represent a turning point in the history of civil society since the crisis definately confirmed that market is one strong and extremely efficient mechanism for economy and technology society development formentation, but it is not powerfull. On the contrary, market limitations, or what is called by most of the scientists today in different areas is „ systematic error of the capitalism“. It forced the polititians, strategists, businiss man, all actors of economy life in society, so start searching, built and develop collectove institutions and mechanisms. Process of these machanisms establishing can be subsumed under one mutual denominator – searching for human sense of economy and technology developmet where the central point of all those programms were the fight against unemployness.

On those fondations originated modern strategies of tenable development, and social practice by strngth of facts confirmed that the nbest resulty on the plan of economy and technology devlopment, and on that based peoples quality of life, achived those countries that optimally connected principle of trade game and principles of social justice and solidarity [6].

2. ECONOMIC CRISIES – OLD PROBLEMS IN NEW FORMS

Economy crisis with which is today confronted society confirms that all mechanisms and instruments, all strategies and measures of economy policy and besides its incontrovertible significance, did not succeeded, either on the national nor on the global level to prevent appearance, and more faster growth of actual crisis. It, of course, means that they were not permanently and systematicly removed. At least they marginise the sources of economy crisis. In certain sense, actual crisis in rough manner reminds us that history, if not always but at least in this case is repeating. Speacking by pedagogy dictionary, economy crisis can be seen as restoration, or „confirmation of previous material“, and condition where the world is always warns that all actors of economy life were not good pupils, and that repeating it will cost us highly. What is good in all of that is the fact that all actors are afare of crushing and longterm concequences that criis would leave on national and world economy. It will all happen if we do bot define and realise efficient programms of its prevention, or at least debasement its economy, social and other concequences. That degree of anxiety, or fact that confrontation with crisis, strategies and mesures for its prevention represents today political and social question number pne. It speaks in best way about potential and real concequences that crisis can bring and with which considerable number, firstly, members of labor worls alrady were confronted with.

Everybody are worried, but that is not enough. Almost there were no relevant prognosis regarding lasting time and evaluations of crisis concequences. Course of events, at least till now, shows that and science and policy goes within spelled circle, as prisoners of already used, but obviosly unsufficient efficient mechanisms for leaving the crisis, and that there were no force to make even one stride out of that spelled circle toward something essentialy new, different.

Analyse of causes that brought and defining of roads of leaving the economy crisis where was the modern world already, necessarily must include the question of position, strategy and perspective of management. The very definition of management as the managing process of productive and labor processes, ot optimal connecting machines and creative energy od human work, and managers as specific social group, speaks about it and they have one part of reponsability for crisis where falls modern world and potential energy that can provide for global economy to come out of crisis and enters again in phase of prosperity [3]. Nowdays many, as in our country, and in others, considerable part of the blame for crisis appearance and unemployness as its invisible and the most drastic social-economy concequance blaim management. In the same time they expect for management to with their proffesional skills and knowledges stop the growing crisis flow and reemploy business and producing capacities. Does the management realy possess that wand.

Question in that case is, how is possible to transform that potential force into real management force. It means to define and recognize obstacles that are showing in the moment of accomplishing that aim. In other words, in the function od successful confrontation with causes and concequences of the crisis must be seen, critically, actual and redifine future relation of the management, new technologies and crisis. If we have on mind the fact that XX, and of course and beginning of XXI century, is the century of extremely dynamic technology development, that has developed to unsuspected dimensions the creative power of human hands and minds, and in the same time has changed the contet and flow of our everyday life., we must ask teh question if the management was unsuccesful in answering, at least not in total, to this big challenge. Was the development of science and new technologies to which they contributed by themselves, was faster that the power of the management to built and develop that kind of managing systems that will use that creative energy in better and more suitable manner. How much is al all real social power of the mangers and how much did management adjusted itself to new circumstances, how and in what measure management influence on new technologies creation.

Regarding management and managers, specialy in the last few decades were written a thousands of pages, studies, researches, that by itself speaks so much about management significance, apsopos their startegy functions for economy and technology development of the company, but and national economy in total. Likewise, in public opinion, in its dfferent parts by education, social position, material status, exists high degree of compliance for significance, responsability and high social power of the management. Of course, that kind of constation infallibly opens the question if that attitudes respond to real social power and objective ranges of managing function. In that regard economy crisis will represent lacmus paper that will show real position in key indicators of social role successfuness and management functions in new social circumstances.

3. RELATIONSHIP MANAGEMENT AND NEW TECHNOLOGIES - NEW ASPECTS

That kind of social role conception and management function, represents on of the inital basis for analyzing relation between management and new technologies. Economy crisis only in new manner, through new phenomenal forms opend this question. This question can be put also and in most direct and the most open manner – is it possible today for management, apropos strategy of development and producing systems management to be put of step with new technologies and is that gap one of the basic sources of actual economy crisis and its economy, social and moral concequences. Just asking that kind of question understates that management observes in wider social conext, apropos in interaction with all relevant factors of social encirclement. First question taht is imposed is the question what are the sources of disrepancy between new technologies and management.
In searching for answer ofn this question, the starting position is in historical flow of management relation and new technologies. Analyse of this historical flow, firstly confirms that new technologies and management through whole flow of developemnt of capitalist trade manner of production, functionally are connected and inter depended. It can be said freely that new technologies, apropos their more and more dynamic development, what represents one of the permanent trade market determinants, is birthplace of management, as assemblage of proffesional skills and knowledges, used scientific disciplines and special social cast. Particulary, management becomes on that historical boundary line where is separated ownership function from the function of producing system managment. It happend exactly because new technologies became more complexed and requested bigger expertly and professional knowledges for managing new productive processes. From that boundary line social role and management power notes permanent tendency of growth. From it came the theories regarding omnipotence, or at least management domination over all other aspects of management over labor and productive processes and society in total which social practice negate by power of facts.
For total, systematic insight of relations between new technologies and management, is necessary to install, in analyse, one more aspect – process of origination, apropos creation of new technologies [4]. That very process of new technologies creation, seen in time dimension and in modern age, experiences essential changes that extremely influences on forming relations between management and new technologies. This problem, in modern sense of that word, opens itself with becoming and market manner of production development. Inital capsule and taht process driving force, that permanently received higher dynamic, was the change of relations of science and process of creating material goods that is mostly birthplace of industry, trade manner of production.
Namely, till the beginning of industry way of production, process of advancement goods for production (for which today is used modern name ***New technologies***), was present in two directions. One direction was specific working process, apropos production of material goods through which man attained new, improved existed experiences and knowledges, advanced existed, created and made new tools. Other direction, was the science, apropos discovering natural legalities, as and constructing various machines, aparatus and mechanisms, that used human, animal, or energy of natural resources. These two directions flew paralelly, often and completly separated from each other. It is long term period of human history where between scientific discovery and its scientific use passed decades, and not rearly even centuries.
These two directions, as key sources of creative force of human work exist even today, just in accordance with new social circumstances where they are shown through new phenomenal forms [5]. However, essentialy their relation was changed and therefore they are today functionally connected and interdepended. It provided multi inlarge creative power of human labor and so show it through bigger productivity, rentability, profitability, higher amount of material goods, their accessibilityto wider circle of consumers, new human needs becoming. On phenomenal plane it was shown through the fact of time decreasing between scientific achivements and their practical use on time from 2-5 years in technology most propulsied sectors, through development of whole row of used scientific disciplines that represent specific joint of scientific creative vision and practical functioning of new systems and processes. Finally, and very management is applied scientific discipline that represents logical answer on changes taht has just happend and more intensly envolve on the plan of modern relations between science and technology. Essence of all of these processes is very picturesque expressed in well known catcjword „tht science became necessary productive force“.
It is logic and expected that this essential change of relation between science and technology, essentialy influenced on management development, changes in its character and content, relations with other disciplines and spects of production and economy life of society, firstly, by putting in front of the management essentially new, more complex and difficult challenges and requests. That fact is, ultimately, conditiones for management to, as specific scientific discipline and profession comes out from the companies frame and goes on the field of delopmental startegy of national economies, and today more and more global economy.
However, besides determination that larger functional connection and interdependence of technologies, science and management, it is necessary to see and analyse one indisputable and on phenomenal plane visible boundary line [7]. Even new technologies are one of the key contents of trade game, and it means and strategic field where are seed objective targets of management strategy, management is not irect creator of new technologies. It is still

relatively closed field of specific social groups actions and activieris that make fundamental, applied sciences and constructors of different professions and vocations. Their particularity is their inividuality, creative power taht with every inivudually manifests in special way, imagination, individual courage for imagination and sometimes alsmos unimaginable ideas, approaches in cerious research manner.
It, of course, does not mean that management does not need courage and imagination. On the contrary, they are in the foundations of modern management. However, it is obvious that we are tlaking about two types of courages and imaginations, that just in optimal joint, can give the best possible result. From it comes one more very important conclusion. Namely, when it is spoken nowdays about relation between management and new technologies, we are not talking about relation between management and machines. It is inevitable that this is also part of the management, but the operational one that is related on managemnet of standard, wellknown oriductive systems. Relation between management and new technologies is today in strategic sense relation of management and managers toward creators of new technologies. Is and how is nowdays changed and in what sense thisrelation regarding previous perids of industry, trade manner of production.
It is obvious that management and creators of new technologies can not be without each other. Between amnagementa and creators of new technologies was created from the very beginning specific conexture of relations, that in ssence must be complementary, but often contradictory and with conflicts. On it in great measure influence the fact that and management and creators of new technologies have great social power, that their social power for decades backwards notes the tendency of growth, but there were also and different sources of their social power. However, exist and one mutual source of power, and that is knowledge, but different knowledge by content. It in certain sense remainds on the system of modern safe deposit securing where are kept money and values. One segment of this securuty understates existence of two different keys that are always with two different persons. Sahe lock leads to the money or values and can be unlock only when are those two persons as two keays ate the same place. In that manner simbolicly said the lock of economy and technology advancement of one company, or the society can be open only when is open in the same time, together, management and creators of these new technologies.

4. CONCLUSION – NEW FIELD OF KNOWLEDGE

Exceptional dynamicy of technological development, that represents one of the key marks of the second part of XX and beginning of XXI century, specialy development of informatic technologies and menas of communication conditions and the origination of new parameters of relations between management and creators of new technologies. Important, but not the only aspects of these realtions, are material and financial investments into developments of new technologies. Parallely flow and process of new knowledges achivemnts or precisely said the forming of new areas of knowledge as for the management for the creators of new technologies too. That new fiield of knowledge is mutual for management and for the creators of new technologies. They represent material basis of funcional connection between them. This new area of knowledge is related with process of managing by integral scientific-research, developed and productive processes [1].
Actual world ecnomy crisis can be observed and from that aspect – as disfunction of management and creators of new technologies. Successfulness of teh management from its first steps till today were measured by different parameters from which one was inevitable – development of new technologies. Development of nes technologies was one of key determinants for strategy and business policy of all successful managers. By principles of resonable logic development of new technologies should bring permanent economy development, growth of standard and quality of life. Current economy crisis, however, just warns us one more time that this relation is not rectillinear. It requests to observe if and which part of responsability goes for the management.
At first sight, we have an impression that existed conceptions and management strategies, are not in condition to overcome growing power of new technologies. Or creative, production force of new technologies s still not sufficient to win through destructive effect of the crisis.
By asking these questions, apropos facts that modern world for longer time is confronting with them already, where we were reminded by economy crisis by its growing social consequences, in essence represents first step in direction of redefining concept of management, its social role and function, essential and changed relation toward new technologies and its creators, consistent with social circumstances that brings new age.

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CREDIT RATING OF SERBIA AND FOREIGN DIRECT INVESTMENTS

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Summary: *Development of the banking system in Serbia for the last four years can be viewed in the context of economic development of the country with all the characteristics of transition. Interest of economic entities is that have a stable, efficient and healthy banking system, which builds and operates solely on the basis of the market. The aim of this paper is to point out the importance and the fusion and acquisitions in the banking sector for the development of the countries in transition.*

Keywords*: banks, privatization, interest rates, merger, GDP*

1. BASIC FEATURES OF BANKS IN SERBIA

For our country and other European countries in transition, banks from the EU are important partners. Foreign banks are interested in, and the intensive work on the expansion, diversification and rationalization of operations in the transition countries from profane reasons.

Development of the banking system in Serbia last four years can be viewed in the context of economic development of the country with all the characteristics of transition. It is an interest of economic entities that have a stable, efficient and healthy banking system, which builds and operates solely on the basis of the market. Bank and other institutions in the sector of financial services, are faced with certain problems in identifying characteristics distinctive services and sources of competitive advantage. They are related to characteristics of financial services (complexity, highly individualized marketing system, heterogeneity).

The entry of foreign banks in our market there is decreasing interest rates on loans that the bank granted the economy and population. However, interest rates on bank loans are still too high - in relation to the economic power users of credit in comparison with interest rates in the countries in the region that are in the higher stages of the transition process. Foreign banks in Serbia will be the leaders in the classification of customers according to the exposure to credit risk in a way that will mean that the first customers to be in a position to pay a lower cost of credit.

Serbian banking sector has intensified business activity than a half since 2004. The empowered healthier and better balance the structure of liquid position, which is monitored and intensive growth of credit activity, and growth of nominal and real values of the capital.

When in November 2004 received a credit rating B + for long-term state bonds and B for short-term loans from the U.S. agency Standard & Poor, Serbia was able to enter the European and world maps of investors.

There was enviable progress in the negotiations for the SAA (Stabilization and Association Agreement) with the European Union (the first step towards eventual EU membership). Also, successful implementation of IMF loaned program will result in the write-off debt of 15% at Paris Club official creditors. By reorganizing fiscal regulations, and by relief of debt. Since 2001 Serbia has attracted nearly 4.5 billion dollars of foreign investment in 2006 year was a record inflow of 4.1 billion dollars.

Table 1: The biggest so far achieved purchase of domestic banks
(*Source: Journal Biznis & Finansije, No 12, oktobar 2005. s. 25*)

Domestic bank	**Buyer**	Participation of foreign banks in the capital	**Value of transfer (u mil.€)**
Delta bank	Intesa (Italija)	90,00%	333,0
Jubank	Alfa bank (Grčka)	88,64%	152,0
Panonska bank	Bank Sanpaolo24	87.39%	112
Novosadska bank	Erste bank (Austrija)	83,28%	73,2
Kontinental bank	Nova Ljubljanska banaka (Slovenija)	98,43%	49,5
Nacionalna Štedionica	EFG Eurobank (Grčka)	62,50%	44,4
Meridijan bank	Credi Agrikol (Francuska)	71,00%	34,0
Atlas bank	Pireus bank (Grčka)	80,00%	19,5
Niška bank	OTP bank	89.4 %	14.2
Exim bank	HVB bank (SCG)	-	-
Vojvođanska bank	Nacionalana bank grčke	99.43%	

Table 2: Credit rating of countries in transition (*Source: Credit Susse*)

	Fitch ICBA	**Moody's**	**Standard& Poors**
Albanija	n/a	n/a	n/a
Bosna and Hercegovina	n/a	B2 (Stable)	n/a
Bugarska	BBB (Stable)	Baa3 (Positive)	BBB+ (Positive)
Hrvatska	BBB- (Stable)	Baa3 (Positive)	BBB (Stable)
BJR Makedonija	BB+ (Positive)	n/a	BB+ (Stable)
Moldavija	B- (Positive)	Caa1 (Stable)	n/a
Rumunija	BBB (Stable)	Ba1 (Positive)	BBB- (Stable)
Srbija	BB- (Stable)	n/a	BB- (Stable)
Crna Gora	BB- (Stable)	n/a	BB- (Stable)
Slovenija	AA (stable)	Aa2(positive review)	AA (stable)

Until now, the inflow was predominantly directed towards the service sector, especially trade and banking, while the amount of investment in the industry was smaller.
The reasons for investing in Serbia:
(a) South-Eastern Europe is growing market and Serbia offers excellent access to the market
(b) The potential for progress in integration with the European Union through the SAA
(c) The lowest rate of income tax in Europe
(d) Trained workforce by reasonable prices

2. STRUCTURE OF BANKING SECTOR IN SERBIA

In Table 4 we can see the movement of the number of banks in Serbia in the last three years.

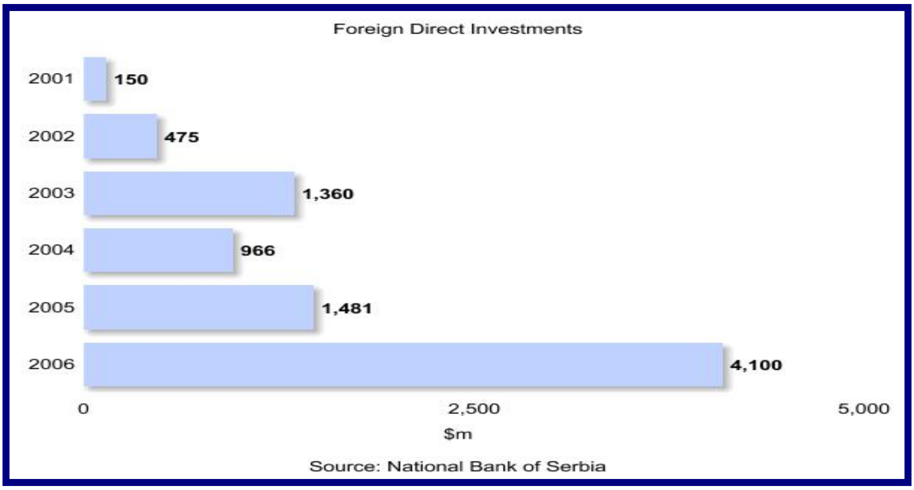

Figure 1: Foreign direct investment in Serbia (Source www.nbs.yu/)

Table 3: The largest investors 2002-2005 in the process of transition in Serbia (*Source: SIEPA*)

Company	**Country of origin**	**Industry**	**Investment**	**Value(mil €)**
Telenor - Mobi 63	Norway	Telecommunication	Privatization	1.513
Philip Morris	USA	Tobacco	Privatization	518
Interbrew	Belgium	Brewery	Acquisition	430
Banca Intesa	Italy	Banking	Acquisition	333
Mercator	Slovenia	Retail sales	Greenfield	240
Lukoil	Russia	Oil	Privatization	210
Holcim	Switzerland	Cement	Privatization	185
Alpha bank	Greece	Banking	Privatization	175
US Steel	USA	Steel	Acquisition through banking	150
Metro Cash & Carry	Germany	Wholesale	Greenfield	150
OMV	Austria	Oil Pumps	Greenfield	150
Lafarge	France	Cement	Privatization	126
Coca Cola	USA	Drinks	Acquisition	100
CIMOS	Slovenia	Automobile	Privatization	100
Airport City	Israel	Real estates	Greenfield	100
Titan	Greece	Cement	Privatization	94

Table 4: The structure of the banking sector in Serbia 30.06.2007. godine (Source, www.nbs.yu/)

	31.12.2005.	31.12.2006.	31.03.2007.
Number of banks	40	37	36

During the first quarter of 2007 business is a bank more than the previous quarter because Opportunity štedionica ad Novi Sad received permission for the work of the NBS to continue as an Opportunity Bank ad Novi Sad. 23.
General rating experts is that in 2006 continued economic trends and overall economic growth, that with careful management of economic policy in the coming years, should lead to its complete recovery. According to the evaluation of analysts, the performance of monetary and economic developments in the country could be defined as:
- Solid GDP growth of 5.3%
- High appreciation rate of CSD in relation to the euro by 8.3%
- Strong impeachment movement inflation 6.6% [8].
Growth in gross added value of products (6.5%), faster in 2006. year in comparison to the previous (5.5%), focus of support were stable and significant growth of exports (28.5%), significantly higher growth of industrial production in comparison to 2005 of 4.7% and the highest year growth civil service in the last 5 years, from about 20 %. 25
Total GDP growth (5.3%) this year, is somewhat slower than the previous, and not a consequence of the slowing down of economic activity, but the fiscal deficit, which is again funded from previously accumulated assets, mainly from the privatization.

Table 5: Banks owned by the Republic of Serbia
(*Source:* www.aod.srbija.yu/and www.nbs.yu/)

Rb.	Bank	% share Republic Serbia	The participation of banks in bankruptcy	Total share
Banke sa većinskim vlasništvom Republike Srbije				
1	Credy bank Kragujevac	60.54	8.04	68.58
2	Privredna bank Pančevo	92,98	2,99	95,97
3	Srpska bank a.d. Beograd	96.52	-	96.52
4.	Poštanska štedionica a.d. Beograd	50.52	-	50.52
Banke sa učešćem Republike Srbije ispod 50%				
5	Agrobank Beograd	18,73	2,13	20.86
6	Čačanska bank a.d.Čačak	38.84	-	38.84
7	Komercijalna bank Beograd	40.31	-	40.31
8	Jubmes bank a.d.	21.10	6.96	28.06
9	Privredna bank Beograd	19.40	-	19.40

Visibly recovered after years of reform, the banking sector of Serbia has intensified business activity than a half of 2004. The empowered healthier and better balance the structure of liquid position, which is monitored and intensive growth of credit activity, and growth of nominal and real values of the capital.
The total balance assets bank sector (the state of the 31 12th 2006th year) amounted to 1,162 billion dinars, and more to 50.8% in comparison to the end of 2005 year.
Support such recovery provided a certain stability of the monetary system, and the process of structural reform, which is primarily thought to the changes in ownership structure. The effect of privatization in many banks

recorded as a qualitatively new relationship to management, but also to position on the market, in the light of strengthening competition.

Table 6: Banking sector of Serbia in the period 2001-2006 god. (u mil. dinara)
(*Source:* Association of Banks of Serbia and the Republic Institute for Statistics)

Element	**31.12.2001.**	**31.12.2003.**	**31.12.2005.**	**31.12.2006.**
Number of banks	86	47	40	37
Total balance size in mil. Dinars	891.947	377.264	756.968	1.161.936
Capital in mil. Dinars	-207.433	86.302	136.471	215.422
Capital u mil. Euro	-3.474	1.263	1.470	2.726
Financial result in mil. Dinara	-249.139	-1.105	7.272	16.725

The influx of direct foreign investment increased dramatically, not only on the basis of privatization, but also direct debit banking and economic sectors. The consequences of this debit were a sudden increase in the money supply in the market, as well as a large growth in aggregate demand. Inflation is at the end of 2005 escaped control, and the curb and the priority of monetary policy in 2006 year.
Public consumption is not reduced, so the balance of inflation trends absent, central monetary authorities remained a serious task to restore monetary stability.
NBS is in 2005 used classical instruments of immobilization of deposit potentials of banks. Namely, she drew money from circulation through the high rate of compulsory reserves to 18% on dinar deposits and from 38% to 40% in foreign currency. In 2006 continued with these very restrictive methods, when required reserves in foreign exchange reserves amounted to 45%. In such a situation, it is expected that just rehabilitated balance structure of 29 banks will not easily submit this high immobilization deposit potential, and in the second half of 2006 occurred:
(a) Clear stopping the growth of scale credit activities
(b) Stopping the trend of falling interest rates
(c) Change in the structure of the approved loan
(d) To increase direct debit economy abroad
These high costs of regulation in 2005 and 2006 have increased costs of the Source financing new bank loans (especially from foreign source), however, banks are not immediately transfer to customers, but it was to stop until then falling trend in interest rates.
Banks, particularly those more powerful did not want to lose your position on the market, and the sake of it consciously sacrificed the earnings per approved a new loan which is financed from foreign Source funding.
Banking sector of Croatia is the business in 2006 finished the year with positive financial result, achieved a profit before tax of 16,712 million dinars, which is again higher in comparison to 2005 year, when it was 129% less. It is believed that the achieved level of capital strength far below satisfactory, which means that the work on strengthening the capital bases of domestic banking industry still recorded as one of the priorities [9].
This report is in and the Ministry of Finance of the Republic of Serbia, "in the macroeconomic and fiscal framework for the period 2008.-2010."Naglasivši the following: "Macroeconomic Policy to 2010 year will be focused on maintaining macroeconomic stability and creating a favorable environment for investment activities, which will contribute to achieving long-term sustainable high rates of economic growth. On those basis is expected reduction of high unemployment, and growth of living standards. "
And among other things, states: "In the period from 2008 to 2010 year will continue to quickly implement a wide front of structural reforms, which are typical for the second phase of transition. The most important reforms in this period are: completion of privatization of social enterprises and state banks and insurance companies;"

Although still small, in the period since 2004 to 2005 earnings per capita increased by about 25%, or about 50% by the end of 2006 year.

Table 7: Average earnings per employee in the Republic of Serbia
(*Source:* Statistical Office of the Republic of Serbia)

Year	**Average earnings**	The average salary without taxes and contributions
2004.	20.555	14.108
2005.	25.514	17.443
2006.	31.745	21.707

Growth in gross added value of products had a focus of support in a stable and significant growth of exports (28.5%), significantly higher growth of industrial production in comparison to 2005. of 4.7% and the highest annual growth of civil service in the last 5 years, from about 20%. Total GDP growth-a (5.3%) this year, somewhat slower than the previous, and not a consequence of the slowing down of economic activity, but the fiscal deficit, which is again funded from previously accumulated assets, mainly from the privatization

Table 8: Gross domestic product in the period 2002.-2005.
(*Source:* Statistical Office of the Republic of Serbia)

	2002.	**2003.**	**2004.**	**2005.**
Growth rates of GDP (%)	4.2	2.5	8.4	6.2
GDP – total in mil. EUR 33	16811.8	18008.7	19723.5	21107.9
GDP- by resident in EUR34	2241.6	2407.4	2642.8	2836.8

In Table 9, we can see the growth of exports. In comparison to 2005 in 2006 increased to almost 50%.

Table 9: Export in period 2005-2007 on date 31.7.2007 (in mil USD)
(*Source:* Statistical Office of the Republic of Serbia)

2005.	2006.	2007.
4481.8	6427.9	3363.3

When we talk about inflation, we can not forget that in 2005 whole was 17.1%. By the end of the current 2007 year, is estimated to be 6.7%, and for the next year but predicts the fall of the entire 1.2% [10].
Although it is far from Croatia, which for this year is to have inflation of only 2.7%, we can not forget all the turnarounds we had in the political system, the economy, in banking. Looking at how to work the land from the environment can help us to determine which course we will go, a course that will be stable, but directed that faster progress.
The total balance assets of banking sector (the state of the 31 12th 2006th year) amounted to 1,162 billion dinars, and more to 50.8% in comparison to the end of 2005 year [9].
Since 2001 Serbia has attracted nearly 4.5 billion dollars of foreign investment in 2006 year was a record inflow of 4.1 billion dollars. The influx of money restored to life the financial market in Serbia, which is open channel flow of money, the possibility that the funds fertilizing, and to save.
From table 10 we can see that there is constant growth of volume of trade in securities, and that in the current year the increase. The influx of capital stimulates the population to invest and thus make attractive offerings treasuring of money or ordinary savings.

Expansion of banking sector had positive effects on development, not less important, the market such as insurance market and market investment funds.

Table 10: Transfer of value paper on Belex in period 2004-2007. (*Source:* *www.belex.co.yu*)

Year	Number of transactions	Value of transactions in CSD	Bonds RS	Shares
2004.	138.842	40.583.66,543	70.04636	68.796
2005.	173.485	48.350.670,609	46.822	126.663
2006.	141.499	100.583.951,914	25.507	115.992
2007.37	217.843	120.948.151,550	11 422	206.410

CONCLUSION

Processes of mergers and acquisitions will last, capital will concentrate in the strongest bank groups. Countries in transition economy at the end of the privatization process, and it is primarily thought of the former Yugoslav republic in which the dominant bank groups from all three, four countries such as Germany, Italy, Austria and Greece. The presence of Slovenian banks and insurance companies is only noticeable, but considering the size of their economy, and negligible.

Not recorded the presence of Anglo-Saxon capital, but in a close future it should not surprise arrival of banks in Japan and China.

As mentioned, the number of banks in Serbia (36) is not optimal for the country of this size. In a relatively developed market economies of a larger bank serving one million inhabitants, and would really be a ten to fifteen banks of different profiles.

Therefore, we can expect inevitable concentration of capital, but in this context is necessary to emphasize that our market is known only to download, and that the use of words or merging only an attempt to lessen the reality of the process. If we look, we will see that all banks have taken over in full change our identity! Services, policy, aesthetics, all the customized new financial institution, because there still is a classic takeover. The process of downloading is in some way at the end, because they are almost all domestic banks disappeared, but he will not stop but will change direction, will mutate in various forms of foreign banks. From which the angle is observed, the arrival of foreign banks, brought with him more good than bad effects.

We can say that the arrival of foreign banking entities become part of a global network that has enabled the flow and transfer inocapital in Serbia. In accordance with this, there are standards of the citizens of growth, GDP growth and the reform of economic entities that are after many years of spinning and get fresh investment capital. We have developed close economic systems and financial structures in the financial, economic, technological terms, and employed a large number of workers, run securities market. Arrival of foreign bank, in fact, educated a large number of people, who until yesterday did not have to know the work on the computer.

As the negative consequences of changes in ownership structure in the light of the arrival of foreign capital, we can, first of all, to emphasize the fact that any radical changes are painful. Employees, used to secure a position now more were not in the position, which caused great frustration for people, because at the beginning of the process closed a large number of jobs.

A large number of subjects were found, because they are in need to change model of financing. Namely, the old banking system of Serbia, continuously funded economic sector, according to the principle of the credit scheme, and are due to different policies of new banks, these companies find themselves in the problem of liquidity, or non solvency

Now when the bank became a reality, left us to accept the new arrival, which would increase competition, improve the offer, and the cost of services and lowered them more accessible and better.

Merging process will certainly continue, and go in opposite. U one time we can expect that the strongest banks will be recognized as a national, and that they will begin downloading in the environment.

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CREATION AND DEVELOPMENT OF MODERN TECHNOLOGIES

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***Summary**: This study gives a review of technology, and especially its origin and development. Knowing the importance of it in the present time, we can say that information technologies are inevitably part of modern business. Although the use of information technology is widespread, it can be always done better and more. Bearing in mind the speed at which new technologies develop, we can expect a new achievement and its presentation to the public every day. This is a difficult and binding work, but brings the benefit to all mankind, especially in the modern age that brings speedy life style.*

***Keywords**: Internet, information technology, companies, data, information.*

1. INTRODUCTION

Electronic business (e-business) can be defined as the implementation of the principles of e-projects in all activities. The task of e-business is the realization and maximizing of profit organizations.
After the idea of electronic data processing has occurred, we gradually came to the first application of networks, which allow direct data entry and distribution of processed information in a specified place in the organization. This process resulted in a new dimension in the way of data processing, which led to changes in business strategy.
By the use of the information system that operates between organizations, e-business developed, and that promoted business cooperation with business entities in all developed countries. The biggest advantage of e-business is that it enables accurate, low-priced and quick data transfer. This is considered to be the main reason for the widespread use of e-business.

2. STAGES OF DEVELOPMENT OF NEW TECHNOLOGIES

Thanks to Alan Turing (1912-1954), the founder of computer science, a philosopher, mathematician and a man who was breaking password codes, we have today's results in the implementation of technology. There is a rough division of the three periods in the development of information technology:
- 1955-1974 – considered to be the electronic data processing (Electronic Data Processing - EDP);
- 1975-1994 - considered to be a period of management information systems (Management Information Systems - MIS) and
- 1995-2014 - considered to be the period of the Internet.

By the end of 1980's, demands for reduced costs and faster database processing in the business have emerged. However, there was a certain delay in the progress of technology, which led to disappointments in the return on investment. There are several explanations for this phenomenon:
- software was partly comprehensive to the average user and was therefore unwillingly used;
- users and managers did not fully understand the importance of applying information technology;
- organizational processes are very complex and complicated;
- it was believed that information systems aggravate the process of business, by automatization of complex structures.

In order to overcome these problems, it was necessary to restructure the business and to highlight all the advantages of application of information technology.
Given the fact that the interest in the company for the application of information technology is growing, there are multi-organizational systems.

3. DEVELOPMENT OF E-BUSINESS

Development of the first communication devices, the first applications that preceded e-business have occurred. Information systems secured first places for ordering, package-organized payment systems and systems for distribution of pharmaceutical products.
It is believed that the implementation of e-business started in the late 1970's, when the pharmaceutical manufacturer Baxter Healthcare offered hospitals the opportunity to order medicines by using a modem and phone connection.
At the end of 1970's, the first POS (Point-Of-Sale) systems were set up, ant they were used for electronic transmission of financial transactions. Also, in this period, the first electronic systems used for electronic links between banks and other financial organizations were developed.
Virtual Office (office without paper) was first mentioned in 1973, in the professional journal of telephone companies. Xerox, a well-known company in mid-70's, envisaged concept of the future office with computers and electronic mail.
The idea of e-commerce was finally used in the 1980's, and then it started creating standards and protocols necessary for the proper functioning of this process. Electronic business is applied in banking, insurance, transport, and in food retail trade.
Internet, WWW (Worldwide Web) and multimedia technologies make the expansion in the use of EDI systems. In this way, e-commerce is becoming affordable for small and medium-sized enterprises, and citizens. WWW technology allows the construction of Intranet organizations that use the same technology to communicate with business partners.
Another advantage of e-business is enabling companies to simultaneously offer ten thousands of products, with detailed technical descriptions.
Breakthrough of technologies is growing rapidly, but still a large majority of documents and information are on the paper. Consumption of paper is measured by thousands of tons and is doubled every fourth year.

4. THE ESTABLISHMENT AND DEVELOPMENT OF THE INTERNET

The first work on networks with package transfer was published in 1961, at MIT (Massachusetts Institute for Technologies). That same year, two distant computers were connected for the first time. One was located in California, and the other in Cambridge. In the following year, 1962, MIT published a memorandum about galactic network.
The Ministry of Defense of the United States, initiated in 1963 project ARPA (Advanced Research Project Agency). It was a military project used for testing the network with distributed control. The network was supposed to be functional, even if some nodes and connections are not used. Of course, experts from the MIT were in charge of the project.
In this period, ARPA was a sponsor of the conference held at the University of Illinois. The result of the conference is the establishment of the first material on the computer networking to 12 universities. Incredible transfer rate for that time was used - 56KB. At that time, the rate was 110B, i.e. 110 bits per second.
After a successful conference, the idea of launching a project under the name of message processor was brought up. Although the goal of this network was the allocation of resources among the computers in the network, the main product of a message processor was the electronic mail (e-mail), which exists even today.
Hardware for network packet was created in 1969. The first messages were exchanged between Stanford and UCLA's. In 1972, it was shown how the network operates, at the international conference called the ICCC (International Computer Communication Conference).
Xerox laboratories introduced Ethernet local area network in 1973, and in 1974 descriptions of TCP / IP protocols were announced.
The main problems were related to the determination of transport routes and efficient transport of data. These problems were solved with the development of TCP / IP protocol, which became the basic communication protocol of the Internet. In use since 1978, TCP / IP protocol was combining two protocols. One is TCP (Transmission Control Protocol), which is necessary for messages to be transferred from the sender to the supplier without any modification. The second is the IP (Internetworking Protocol), which was developed in

order to enable communication between networks. By this combining, TCP / IP was created and it became the standard protocol in 1980. TCP / IP protocol appeared in physical form in 1982.

With the beginning of 1990's, commercial computer networks became widespread. By this process, also the academic network was transformed into commercial one. Linking of these networks gave a network of all networks, the global network Internet. While operating as a unique network, the Internet is organized in decentralized way. National Security Agency from the United States (National Security Agency NSA) is in charge of controlling and managing the flow of information on the Internet.

In comparison with other dominant electronic technologies, the Internet shows a remarkable growth trend in the implementation. It is only a question of day when every house in the world will possess a computer connected to the Internet.

5. CREATION AND USE OF WWW

A great impact on the Internet was made by development of HTML (Hyper Text Markup Language), as well as supporting data transfer protocol - HTTP (Hyper Text Transfer Protocol). Using this technology, Tim Beerners created WWW (World Wide Web), in 1989, at the Centre of High Energy Physics (CERN).

Project Green was the next significant step in the implementation of the Internet. This project was initiated in 1991, by the company Sun Microsystems, under the guidance of James Gosling. The results of this important project was the programming language, based on the languages C and C + +. The original name of the programming language was Oak, but the name was changed after they found out that language under that name has already existed, and the program was named Java.

Java allows the use of opportunities for searching WWW (Web browser), so that, together with the text, images and other data, the program that interprets Web browser can be interpreted. Client installs the applications in the Web browser that thus takes the role of coordination with the operating system and telecommunication protocol, while the server application becomes part of the application Web server. In this way, the concept of virtual machines was realized, according to which the program written in Java can be done on any computer that has a Web browser and is connected to the Internet. As a result, there is a mobility of program, and not only data, as was previously the case.

Mosaic is the forerunner of today's Web browser. Mosaic appeared at the University of Illinois in 1993. According to the model, today's Web browsers are very easy to handle as well, and they unite user interface (GUI - Graphic User Interface), text processing, graphics, sound and video, connected by hyperlinks.

A part of the team that worked on the creation of Mosaic was involved in the development of the first commercial Web browser. Company Netscape presented its first Web browser on 21st December, 1994. In 5 months, this product was sold in more than 5 million copies. Thus the mass use of the Internet was started, and it becomes bigger every day.

Microsoft responded quickly. They incorporated their Web browser into the installation of Windows, and Web browsers became free.

6. STATISTICAL REVIEW OF THE IMPLEMENTATION OF THE INTERNET IN THE WORLD

Internet develops increasingly and quickly. Nowadays, it is almost impossible to imagine a successful company without access to the Internet and the information that are to be found there. Besides using it for business purposes, there are more users who spend their leisure time on the Internet. This number will be even bigger in the future, and one day 100% of the world population will use the Internet. However, in order to achieve that, many conditions, mainly technical ones, must be fulfilled.

Picture shows statistical review of the implementation of the Internet in the world, divided by regions. As you can see, most users are in Asia, Europe is in the second place, and North America in the third place. Of course, these numbers are changing over day.

7. CONCLUSION

It is anticipated that the Internet could replace the phone systems, television, radio and newspapers. Of course, there are already on-line newspapers, internet radio, VoiP (type of Internet telephony), and you can watch a TV program online. More quality transmission of video and audio signal allows Internet users to enjoy more in the tracking of their favorite programs and music. E-books, except for the cryptographic copyright of content, support the possibility of multimedia display and various interactive complements to the contents of the books. Hence, e-books are a serious competition to traditional, hard-copy books.

In the future, new projects can be expected, and they will be introduced by universities and developed countries. The result of the projects will be the faster flow of electronic information and new services, based on high technologies. The implementation of these projects will enable the conditions for the transfer of electronic data more quickly and will allow the implementation of the new service based on high technologies. E-business based on Web technologies should be the holder of economy of developed countries, and the Web will be the dominant platform of information systems in the years to come.

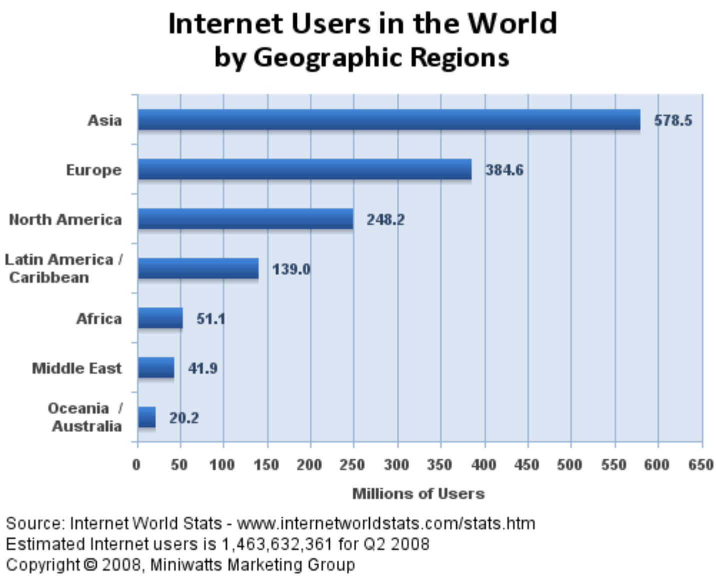

Figure 1: Internet users in the World

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APPLICATION OF THE INFORMATION TECHNOLOGIES AT CAR ASSEMBLY LINE

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Summary: *Paper gives short review about application of the information technology in final assembly of the passenger cars. Thanks to application of the information technologies, supported by computer controlled verification stations in assembly plants, number of failures detected by customers is rapidly decreased.*

Key words: *failure, detection, verificatin station, stand, test*

1. INTRODUCTION

High level of competition in production of the passenger cars, in front of producers set high requirements of the quality standards. Global world producers answer these requirements by application of the information technologies in processes of the production parts and assemblies of the pasenger cars, as in the final assembly of the cars.
For the purpose of assurance of the high level of quality of the deliveries from suppliers, at the proposal of IATF (International Automotive Task Force), Technical specification ISO/TS16949 [5] was introduced in 2002. To satisfy this specification, application of the information technologies is necessary.
TS 16949:2002 is a breakthrough in the automotive industry in that it represents a consensus amongst most of the world's largest car makers and is a starting point in the harmonisation and globalization of designer specified standards. Aimed primarily at tier one suppliers TS 16949:2002 is a technical specification developed and supported by vehicle manufacturers in Europe, America and Japan and will help define quality system requirements for the global automotive supply chain.
Aspiration for Zero Defect requires high level of reliability of the systems in all stages of product life cycles (design, development, production, exploitation) with permanent improvements of the processes.
As shown on figure 1 one of the key determination of the successful business in car production is prevention that failure comes to the customer.
For the purpose of illustration only in this paper will be mentioned, like example, the bigest world producer GM. GM – General Motors [4] , use principle called Build In Quality (BIQ).
A key element in atain of goal of the manufacturing process to "build in quality" is in process control and verification.
The BIQ principle is suported by the folloving objectives:

- Prevention – avoid making a problem
- Detection – find the problem if one should occur
- Containment – stop the problem from flowing to the next process or customer

On the figure 2 is shown functional model of the process control and verification in production of the cars.

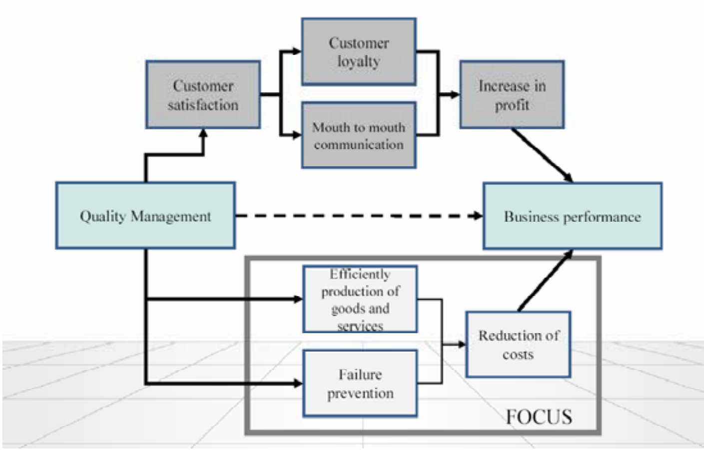

Fig. 1

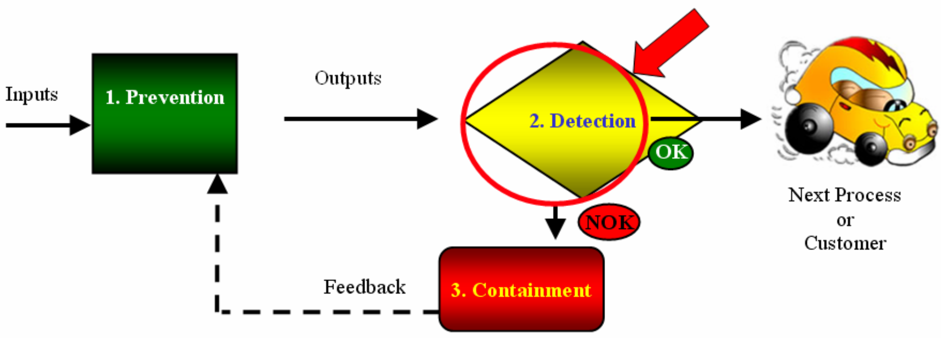

Fig. 2:

2. FAILURE PREVENTION

Using modern quality assurance methods and failure and damage analysis[1], new automotive components are scrutinized in for weak points before costly, image-damaging field failures occur. In order to determine weak points, innovative analytical techniques to Failure Prevention Analysis (FPA) are used.

Basically steps in FPA are:

- Assign data collection tasks for the Failure Prevention Analysis.
- Conduct a detailed review of the current system/component design to ensure that the historical failure modes identified through the FPA process cannot be repeated with the proposed new design.
- Analyze all failure modes identified in the FPA in the design FMEA.
- Verify that actions taken in the new design will eliminate or mitigate failure modes identified in the FPA.

3. DETECTION OF THE DEFECTS

Standardised Inspection Process (SIP) provides a specific tool supporting problem detection – a key aspect of the BIQ element in process control and verification.

Additionally, standardised inspection fulfils the following:

- Measures manufacturing process quality performance; provide visibility of "non-conforming"conditions
- Prevent flow- out of defects to customer (internal or external)
- Supports quality feedback and feed-forward
- Provides input to problem solwing for continuous improvement

Standarised inspection process consists of verification stations located throughout the manufacturing process. Verification stations must be:

- As minimum located at the end of each main process
- Located considering check requirements, layered build, etc.

On figure 3 is shown shema car factory with locations of the verification stations.

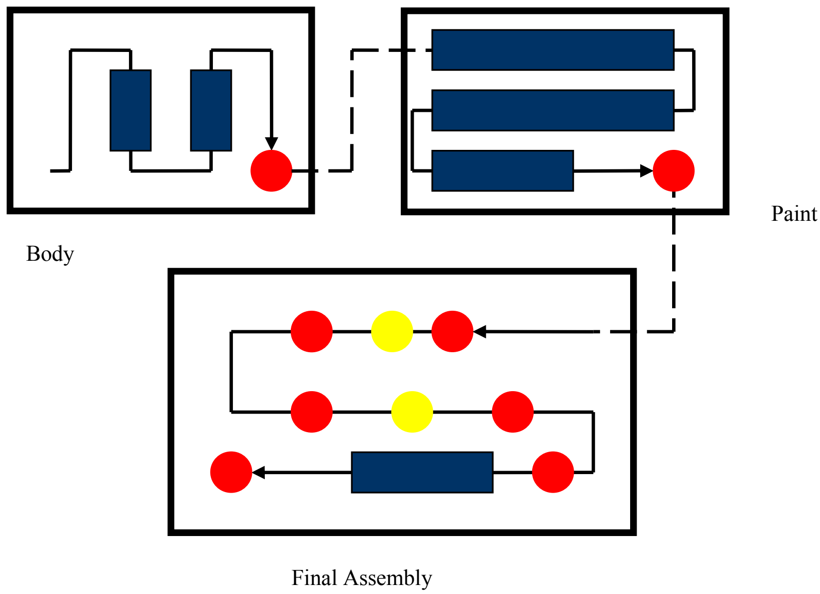

Fig. 3:

The number of verification stations will dependent upon the requirement for in-process detection. Verification stations will be added or removed, as required. Additional stations (on the figure 3 yelow painted) will be added in case of risk, e.g. new model launch.These stations will be removed when plant capability is stable and the risk diminished. Standardized inspection consists of items that are required to be checked based primarily on customer requirement.

Principles of Failure Mode Effects Analysis can be used to develop check lists for standardized inspection.

The standardized inspection process provides a continuous measure of the manufacturing process performance and alarm identifying when non standard conditions are developing, are inputs to the problem solving process. When a defect is detected, feedback to the appropriate team or individual will be given by using a communication system, the alarm is given by using audio/visual signals.

The alarm process directs the support functions to:

- Go and see the problem
- Apply containment to prevent further flow of defects
- Initiate problem solving

If problems repeat, alarm escalated to the relevant levels who must respond. Problems that continue to be escalated should be input to the problem solving process to determine root cause and apply effective countermeasures.

The final element of Standardized inspection incorporates an extensive static and functional check of the vehicle immediately before being shipped to sales and to the final customer: Customer Acceptance Review Evaluation – CARE process.

General principles of CARE process are:

- Vehicles reaching the CARE line should be ready for delivery to the customer-therefore should be complete in all respects.
- CARE should normally be performed as the last check in the process – no vehicles with open discrepancies are to passed to CARE line.

The fact that inspection, before the delivery of the car to the customer, exists even with the biggest car producer, points out the need that the process of the failure detection and elimination, shown on the figure 2, must be returned as possible deeper backwards in the process.
Occurrence of the failures in the process, before the delivery of cars to customers by the well-known car producers, is very rare, but the process of the failure detection and elimination after the descending of the car from the assembly line still exists.
The rule is that the failure detection and elimination happens within the operative team and that the failure discovered on the car must not pass verification stations which surround the operative team. Depending on the car producers, operative teams are differently organised, and consist of 4 to 8 people at Toyota and GM [3,7] and up to 15 at the stage of some final car assembly lines of Fiat [8]. Teams are educated and trained to identify and eliminate possible failures at the stage of the final car assembly line by applying information technologies [4]. Information on failures is sent to the quality engineers via Ethernet so that the teams for solving problems could eliminate the possibility of repeating the failures in the future.

4. INFORMATION TECHNOLOGIES IN FINAL ASSEMBLY OF THE CARS

Engineering companies emphases and develop manufacturing and integration of systems for electrical testing (ECOS-Electrical Check Out System), mobile systems for diagnosis and programming of ECU-s, (MFT – Multi – Function – Testers), (MDI – Mobile Diagnostic Interface), (VCI - Vehicle Comunicaton Interfaces), Mobile Systems for data storage for logistic applications [2].
Producers of the Multi-Functional Testers (MFT) and Mobile Diagnostic Interface (MDI) demonstrates abilities in regard to wireless communication. Wireless Local Area Network (WLAN) and Bluetooth (BT) as well as to design wireless vehicle communication interfaces.
The main advantages of the systems for electrical check and testing are:

- Modular System concept based on client/server model provides for good expandability and easy integration into factory environment
- Test systems aimed at different test applications are managed by only one host computer system
- Use of Ethernet network with TCP/IP communication protocols provides high degree of flexibility regarding installation, integration with other systems.
- High user acceptance and short training time
- Integration other manufacturers test results (OPAL –Open Partner Application Link)
- Only one interface to factory mainframe needed for all test systems, by easing system management
- All test results are stored in one centralised data base.
- Parameter adjustment, statistical evaluation of test results and system management can be executed from PC- workstation located anywhere within the network
- Any PC within the network may have access to the host computer, for analysis of the test result, provided he is granted access right by the system administrator

Systems for standardized inspection in process of final assembly usually consist from next test applications:

- Electrical test of sub-assembly of the instrument panel, doors e.t.c
- Function test and programming of electronic control of the engine after assembly
- Test of tightening torque of the screw joints
- Filling of the fluids
- Test of engine adjustment in idling mode, optional with a exhaust gases
- Test of adjustment of the braking system
- Handbrake test
- Clutch pedal test
- Customer specific test and measurement
- Wheel, headlamp and fog lamp alingment
- Driving vehicle test
- Final testing on the end of the process final assembly

On figure 4 the scheme diagnostic conception of standardized verification systems is shown.
All test systems are connected to central host computer. This allows the quality engineer to manage all test systems from a central PC based workstation. By Ethernet networking any PC hooked to the network may have access to the host and have a look on quality data. The PC workstation is used for parameter setting, quality analysis and system management.
Central diagnostic and management system is connected with factory main frame with one cable, see Figure 5.

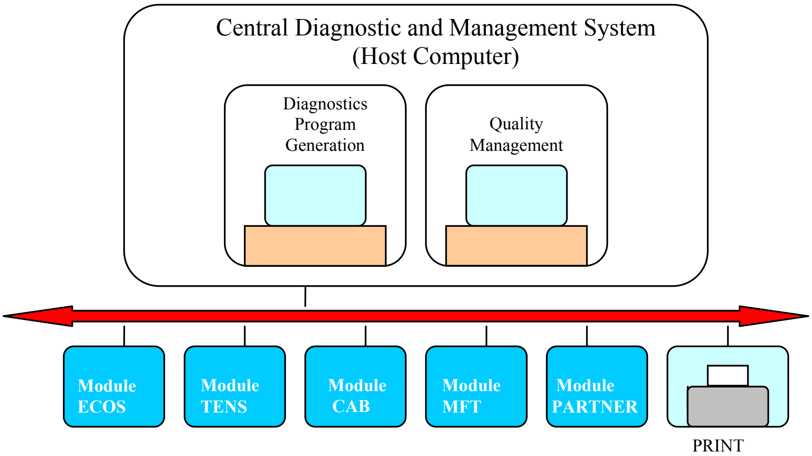

Fig. 4:

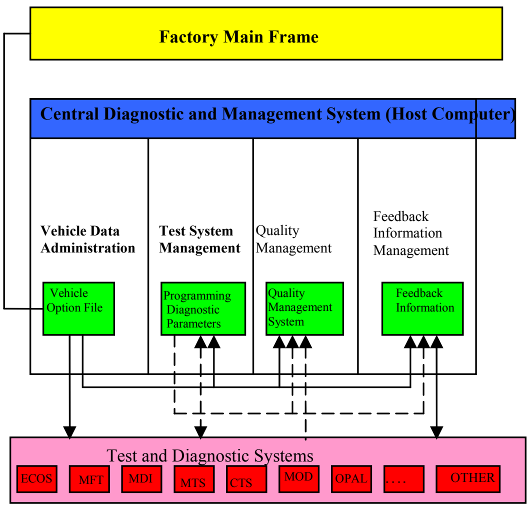

Fig. 5:

As a pre-requisite for the testing of a vehicle detailed information on its individual specification is required. This informations have to be downloaded from a factory main frame system. By TCP/IP based network communication transfer vehicle data can be realized. After identification of the vehicle or sub- assemblies can by barcode reading corresponding vehicle data record is requested by the test system from host computer.
After completation of test a data records holding the test results is transferred from test system to host computer, where are stored with the quality rating of each test step (ok or not ok). Test results can directly be exported to customer's system for further treatment. For the purpose of illustration only and due to lack of space on figures 6- 9 some test stands are shown.
Figure 6 shows the verification station [6] for the preparation of the instrument panel of the car Fiat Punto. Assembly of the instrument panel in modern cars is very complex and consists of several functional sub-frameworks like measure instruments with sensors, air bags for the driver and assistant driver, air condition, filters and different electrical commands. Therefore instrument panel is one of the car frameworks which is very important for reliability and safety of cars. Detection of the failure within the instrument panel at the final stage of the assembly line process would cause a huge waste of time for the repair, because demounting and mounting

of the instrument panel in the assembled car is very complicated. Precise diagnostic instruments with coresponding software detect possible failures within the instrument panel before it is mounted on the car and, by light or sound signals, inform operator and others in the chain for the purpose of the failure elimination.

Fig. 6: Test stand for Instrument board

Fig. 7: Charger of batteries

Figure 7 shows charger of batteries. In modern cars all screw joints are with prescribed torsion moments.
As for the battery tensor tools, this requirement is met through the calibration of the tools on the fixed torque foreseen for the corresponding joint on the car. Light signal warn operator of the discharge of the battery which is subsequently placed on the battery charger. Chargers have electronic circuits which signal the battery discharge, provide data on the charging processes of the individual batteries and the possibility of further use. There is also the precise system for tracking the torsional moments of the tensor tools during the full shift.
Figure 8 shows ECU of tensor, selector for tools and tensor. Without these tools production of the modern cars is unconceivable. The device has several functions, the following of which are the most important:

- Realization of the torque in defined range
- Counting of joints realized by the tools taken from the selector
- Tracking of the torque during the mounting
- Giving light and sound signals in case of failure
- Giving printed data about realized joint parameters
- Connecting with information system provide diagrams with realized joint parameters and statistics.

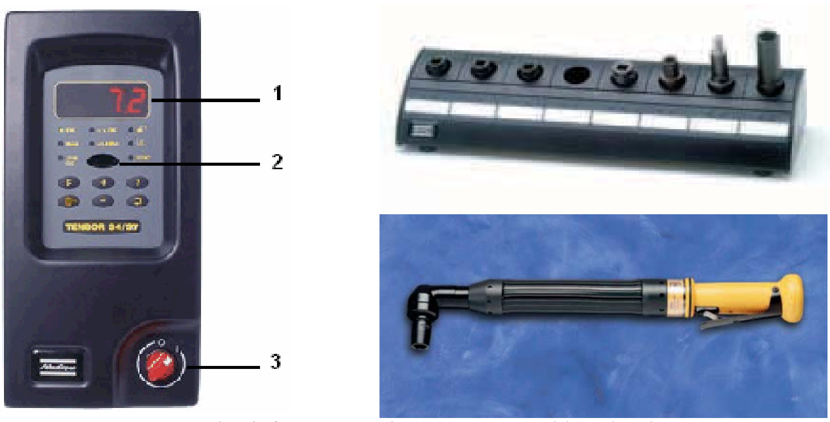

Fig. 8: Control unit for tensometric measurement with tool and sensors

Figure 9 shows equipment for final control of the electrical devises, ECU and key programming. Equipment has sensors and software, which enable the testing of individual parameters of all electrical consumers within a car. Programming of the ECU is in the function of the variant of the car which will be produced. In that way, at one verification station, it is possible to detect failures within the electrical devices and, if these are minor failures, eliminate them before the first engine start and dynamic test of vehicle in the final stage of the assembly line process in order to avoid keeping of the cars in the repair zones.

Fig. 9: Stand for final testing on the end of the process final assembly

In order to help user in monitoring product quality, a set of powerful software modules has been implemented aimed at statistical analysis of test results. The main aim of the software package is to provide on line statistics on the production process. For this reason a direct file access to SQL-based relation database enables query and reports to be fast delivered.

5. CONCLUSION

Requirements concerning the quality standards, which are set for the automotive industry, impose the need of the application of the information technology at the car assembly lines.Need for detection and elimination of failure at the verification station itself imposes the raise of the technical and technological levels of the production operations realization. For these reasons information technologies are not only focused on the statistical recording of failures for the purpose of their solving, yet, by means of modern software and functional connecting, they aim to alert the operator, provide guidelines for the problem solving and, in some cases, enable the solution of the problem.

Application of the modern technologies requires that the worker, except for good psycho-physical ability, possesses good communication ability, problem solving ability, ability of critical thinking, proper approach to the problem and basic knowledge within the field of the information technology.Being applied at the final stage of the car assembly line process, information technology contributes to the elimination of failures which might occur with the customers. In that way the costs of the production are reduced and customers are satisfied with the quality of cars.

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CAREER MANAGEMENT

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Summary: *Career is the succession of changing job positions of an individual during working life. It refers to the moving through job positions, the responsibilities and business challenges. One involved in the career development perceives himself/herself constantly in the process of personal growth and development. This perception keeps motivation continuously maintained. The primary goal of career development is the achievement of current and future needs of organizations and individuals at work, which increasingly includes the development of the opportunities for employment. Success in career is viewed by the individual and can be defined as satisfaction with career through the achievement of personal work goals, within the contribution to the organization. Successful career management assumes a high coordination and cooperation of managers, employees and human resources functioning.*

Keywords: *development, career management, entrepreneurship…*

1. INTRODUCTION

Career development is very important for the person since through it he/she gains better life, social equality, self-respect, self-control, and career self-management.
Increase in professional criteria, commitment to professional and personal career will change aspirations and values of each one of us. One must take responsibility for one's own career. There is no formula to get you the job of your dreams.
One can not achieve a successful business career in an unsuccessful organization. In the established organization with the mission, goals, strategies and plans of activities for the achievement of the desired and expected results are clearly specified, one can easily and quickly achieve the career goals. In such an organization culture, an individual, as an active factor of change in the organization development, may provide the complete contribution. He/she has a strong organization support for the implementation of initiatives and activities that contribute to the development of the organization.

2. CAREER DEVELOPMENT

Career development is an important and complex process which requires that an individual has knowledge and skills in the career management. With the help of advisers, analysis of potential, as well as specification of the goals of the career, one must determine the appropriate strategy for the achievement of planned objectives. Therefore, the final decision on the development is made by that person [1].
Modern business offers a new concept of career without restrictions, which implies non-hierarchic moving between the organizations and within the organizations. Nowadays, career is more than climbing the hierarchical scale of the organization. It increasingly includes personal development, success and satisfaction.
Career can be described as a series of business roles of individuals, namely moving up and progressing in business roles. Career is a series of perceived individual attitudes and behavior related to the experience and activities associated with the work during life, namely the career means making changes in values, attitudes, motivation that occur as a person grows older.

Furthermore, career can be defined as development of the individual in learning and work during his/her lifetime.
The primary goal of career development is the fulfillment of current and future needs of organization and individual at work, which includes the development of employment opportunities. Success in career is viewed by the individual and can be defined as satisfaction with career through the achievement of personal goals related to the work, and the contribution to the organization. Key points in the development of human resources are the choice of job position, the introduction of the work, training, education and progress [2].
If the main factors of career development are present in the company, there is motivation, satisfaction, productivity and equal development.
Career development is very important for the person since through work he/she achieves the quality of life, social security, self-respect, development and fulfilling higher needs. People, their needs, and satisfaction become a center of attention and human resources management, having in mind that the fact that human capital is the main tool of competitive ability and advantage in the global market is grasped.
Career management is the process by which organization chooses, evaluates, allocates and develops the employees to ensure human capital that will meet the future needs of the organization.
Successful management career assumes a high coordination and cooperation of managers, employees and human resources functions. Organizational unit for human resources should have the role of coordinator and one that provides the necessary technical assistance to managers and employees.
For quality management career, the following three types of information are needed:
1. General information on organization mission, strategy, objectives, plans and business development,
2. Information on employees, their abilities, skills, goals and development potential, and
3. Information on jobs and job positions that will be free or will be made as a result of the planned development and changes, meaning information about organizational needs.
From the individual aspect, career development must be envisaged from the aspect of getting to know yourself:
- Establishment of personal preferences, interests and abilities,
- planning of life and work,
- Information on the occupation,
- Selection of the organization,
- Establishment of career development options,
- Working and professional preferences,
- Introducing of managers to individual preferences development,
- Plan of activities for career development,
- self-directing,
- Development of the ability, knowledge and skills, and
- monitoring of internal and external career development opportunities.

The most important period in the career development is entering the sphere of work and the establishment of a career, namely the period of the first employment, job position, chief and the like. This is a critical period for the employee for developing the feeling of self-confidence, learning to harmonize with the chief and colleagues, to accept responsibility and understand what his/her talents, skills, needs and values are. It is a period of testing the reality of the organization and working life and their knowledge and needs.
Career development does not necessarily means a connection with one organization. The times in which the individual was connected to the organization in which he started to work, are gone long ago. One person used to be a tool for the achievement of organizational goals, while nowadays the organizations increasingly become a tool for the development of personal career. Every employee must actively and responsibly plan their own career and be trained for further progress in demanding and complex tasks. He/she must actively and responsibly manage his/her own career, ensure constant competitiveness and working at more complex and responsible job positions.
All of the activities related to the career planning, as well as required skills, can be reduced to four important steps and activities to be undertaken by every individual who wants to manage the career:
- Analysis and determining personal potential and preferences,
- Analysis and the assessment of career development options,
- Establishment of career development goals, and
- Development of strategy and planning of the activities for achieving the set up goals, namely career development.

3. CAREER DEVELOPMENT STAGES

Knowing and understanding the stages of career are important because different stages require different activities, support and help from the organizations and managers, as well as various processes of adjustment of

individual and organizational needs. People change during the career development. They do not have the same values, goals, aspirations and needs at the beginning, in the middle or at the end of a career.
Stages of the career are usually associated with some general life stages, and the most of them are focused on the working life and/or entering the world of work and moving in it.
There are four commonest key stages in the career development:
• Phase of research and establishing a career. This phase starts with the individual's entering the organization and the first choice of job position and that is why it is called the stage of career entrance. It usually takes place between the age of 18 and 25. This is the phase of introducing to the work, socialization with the working environment and organization, acquiring of the necessary knowledge and skills, learning about one's own abilities and preferences, learning about the organization. This is the phase of examining and evaluating one's own opportunities and goals, the introduction, orientation and learning.
• Phase of progress. In this phase, which begins between the age of 30 and 35 and lasts until the age of 40 or 45, the individual has already established a career, has chosen the area of work and demonstrated his/her potentials, has been socialized with the culture and organization, has gained security, confidence and independence in work. In this phase, life preferences, the status of work and professional development in the structure of values are crystallized.
• Phase of maintaining the career. This phase starts between the age of 40 and 45 and lasts until the age of 50 or 55. At that time, a person has a stable and asserted position within the organization, proven knowledge, skills and contribution. This is the phase in which a person knows whether he/she has succeeded in the professional life. This is the phase in which there may be a reassessment of the life style and values, especially for those who feel that they failed to achieve professional dreams.
• Phase of the late career. It starts in the age of 50 to 55 and lasts until the retirement. There are two sub-phases: maintenance and preparation for retirement. Gained knowledge, experience and wisdom are passed to the others or is used for organization development. The second part of the sub-phase involves psychological and professional preparation for retirement, namely the inevitable end of professional career. It may be referred to as the phase of withdrawal, reducing the activity and involvement in the immediate operational problems, passing the responsibilities and knowledge to the younger people.
The phases in the career development can be viewed through the role that a person has in the course of a professional development, setting different requirements and manners of behavior. The roles are as follows:
• Apprentice. He gains the required knowledge for work, fits in the environment and generally follows the instructions.
• Colleague. High competence that allows independent working and problem solving without supervision, as well as responsibility for one's own work.
• Mentor. The role of mentor is to lead, train and influence and give instructions to the others, he takes care of and is responsible for the operation and development of other people.
• Sponsor. At this stage, the impact is spread on the entire organization which means that people in this phase create and influence the strategy and direction of movement of the organization. The person takes over the role of managers, idea innovators and entrepreneurs.

4. CAREER PLATEAU

Međutim, plato danas preti svima onima koji se stalno ne usavršavaju, razvijaju i menjaju, jačajući svoju konkurentnu sposobnost i zaposlenost u sve zahtevnijim poslovnim uslovima.
Career plateau is the point in the development that implies no further or a little possibility for progress. It is a problem increasingly faced by both individuals and organizations.
Four types of plateau can be distinguished in a career:
1. Plateau of abilities and potentials - reaching the maximum potential,
2. Plateau conditioned with organization - the lack of free higher position for promotion,
3. Plateau of personal choice - the lack of new needs, and
4. The employees who can not or do not want to continue with development.
However, the plateau nowadays is a threat to all of the people who do not keep improving, developing and changing themselves, fortifying their competitive capacity and employment in more requiring working conditions.

5. MANAGERS' CAREER

Career is a planned development of skills over time, and not the movement of the individual up the scale of hierarchy. Managers have a very important role and responsibility in the development of individual career of

those whom they manage. They are a key factor in identifying and connecting individual needs, preferences and aspirations and opportunities that the organization provides to the employees.
They pass on and explain the organizational mission, strategy and goals and help the employees to align their career with the organizational capabilities. Their basic task is to monitor performance, to develop the potential of the employees, to point out the impact of the changes in the environment.
Managers in the development of individual career can be regarded as trainers and consultants.
In modern organizations, managers are becoming more and more of the trainers, and the less of the people who command and demand. The role of trainers requires constant communication and the ability of communication, especially careful listening. Besides communication skills, managers must possess knowledge of techniques for self-appraisal and determining of the potential. Thus the managers help employees to determine their own abilities, skills, professional values, interests, as well as areas of development. Managers pass on and explain the mission, strategy and goals of the organization and give instructions to the employees for future needs and directions of organizational development. Explaining the real expectations, criteria and performance standards as well as help in their achievement, is an important assumption in assessing one's own results and determining the direction of further development.
Also, one of the important roles of managers in career development of the individual is the role of advisor. As counselors, managers can in many ways help employees in the process of setting goals:
• Passing on knowledge about the formal and informal organization,
• Helping employees to understand all of the work requirements,
• Reference to trends that may have implications for the competences that will be required in the future, and
• Identification of a variety of alternative paths for career development.
In relation to subordinates, managers would have to take into account that the new employees are offered the good opportunities that would connect them with work and organization. The most important opportunities are the following:
• Challenging work - research shows that the more challenging the first job in the first year in the company, the more efficient and successful was the person six years later;
• Realistic image about the work - providing realistic information for candidates because it contributes to connecting to job more permanently.
• Provide periodic and systematic rotating of work - employees could estimate their abilities and affinities, and the organization could get more competent employees;
• linking the assessment of performance with career development – assessment should determine possible directions of career development and jobs that would suit the associates best; and
• Setting high demands and expectations - the expectations and requirements of managers are essential to success and development of the subordinates.
Managers must also change the understanding of their career. Everyone is subject to accepting his/her career as unchanging and completely known at one moment. This is a result of past experience of the employees and business standards of the organization. Need and skills for career development that has reached plateau must be motivated by linking the needs of managers with the new reality, more than the desire to achieve the level in the hierarchy, which is reduced or no longer exists.
It is possible to distinguish the following types of managers in relation to their understanding of their own career:
• Ambitious type. This type often changed his/her job over time and thinks there are still possibilities for progress. They admit that the job requirements change, but feel that there's more space in the organization for them. They want organization to help them make the steps necessary for further progress;
• Adaptable type. Accepts a series of changes in his career - research, special projects, entering the other business areas, hoping to get help from organizations in the creation of opportunities for such activities. Are ready to change the scope and responsibilities of the current job;
• Outgoing type. This type of manager wants to reduce his commitment to work. Thinks about working half-time, working as a freelancer or becoming a consultant in the organization. Willing to accept early retirement, and even to get fired. This may slip superiors' attention who regard them valuable employees, and
• Lifelong type. Realizes that circumstances change and are further modified, but wants guarantees that he will remain on the current position until retirement. They are not fascinated by the stories about flexibility and salaries in accordance with performance. They believe that long, loyal service is the basis for rewards.
Career development is one of the most important aspects of development of both the individual and organization, and it must be given much more attention than it is now in our organizations. Lack of market for human resources, as well as markets in general have been reduced the importance of career development.
Intensive competence in the world of business, new technology based on thoroughly trained staff, ready for efficient and professional working and social adaptation and team work repeated many times, labor psychologists and personnel managers are put in the position of highly responsible specialists for general management in the business, which is in total quality management function (TQM).

The most important problems that personal managers and/or labor psychologists encounter, concern the planning, selection, scheduling and motivating of the staff, education and training of employees, development and management of employees' career, development and management of the teams, the improvement of working conditions and service for workers, communication and relationships in organizations, assessment and rewarding staff.
Personal management takes into account a number of changes that take place in organizations and the environment, which especially refers to the political, economic and social dynamics. Thus, the basic functions of personnel management are planning and utilization of personnel, their motivation and protection in the highly dynamic conditions of everyday life.
Although the management career is only one of the tasks of personnel managers, the resolution, due to the fast pace of technological and economic changes that made the course of employees' career today much more changeable, of great importance for the functioning of organizations. Knowledge that labor psychology can offer for resolving the issues from the domain of career management is unavoidable.
Career can be defined as a series of jobs and positions that one takes in professional life and that includes attitudes and behavior related to these jobs and positions. It can be also said that a career is a set of experiences that one acquires, related to the jobs they do throughout life.
From the aspect of labor psychology in relation to the definition of a career, there are two significant moments:
1. The course of a career as a general characteristic that can put stability or changeability in the first place, and
2. Experience of success or failure in the career, measured by objective or subjective criteria, that may or may not correspond.
You've just finished with education and you look for the way to successfully start a career? Or you have invested many efforts in your own professional development and feel the need to change that will take you one step further? Regardless of what are looking for, why are you looking for and are forced to seek; process of management career must be accessed aware of the importance of self-control in each step.
There is no system that will get you to the job of your dreams. Especially there is not a system that will operate flawlessly, and always for everyone. The process of active management career consists of many aspects and the best you can make is to access each one of them in methodical and systematic way.

6. MAIN SPECIFICATIONS OF CAREER MANAGEMENT

You took time and effort for the development of your knowledge and skills. You have become (or want to become) a specialist in the area of your interest. In order to fully develop your own potential, you will have to become an expert in the management of your own career. Namely, the market conditions nowadays place the requirements that that assume not only knowledge and desire for work in order for you to be given the opportunity to work and satisfaction with what you're doing. Your career will go through different stages, and it depends on you whether you will see the opportunity for the desired success in each of them.
You must take responsibility for your career. No one will do that for you and therefore you need to direct it and build it yourself. What is self-management of your career, in fact? In the first place, it means getting to know yourself.
Think about:
• What in fact do you want of your career?, and
• What the jobs you would like to do have in common?
Elements that determine the satisfaction by work are different and, in a way, depend on the personal ambitions. Examinees most often refer to the importance of working environment, interpersonal relations and the "atmosphere". The possibility of further education, creative work and innovation, a certain dose of independence, flexible working hours and security are stated as elements that determine the level of satisfaction with the work more than the income does.
International research called Work Importance Study (conducted in the 80's and 90's of the 20th century) has defined a few important values that people want to achieve through the work and valuable orientations that lead to the selection of job and career development. The research was conducted in the following countries: Australia, Belgium, Canada, Japan, Italy, Israel, Poland, Portugal, South Africa, United States, Croatia, France, and the United Kingdom. Considering the importance and central role of a job in the life, few goals trying to be achieved through the work were emphasized.
These are:
• Economic stability,
• Identity,
• Status and prestige,
• Self-achievement,
• Independence,

• Creativity, and
• Social interaction, and many others.

The survey has taken into account these and other values, and tried to examine similarities and differences of various nations in that what people strive to achieve through the work. Members of different nations and cultures have different values for certain aspects of work, but the most highlighted are the following:

• to develop and reach self-achievement through the work,
• to use and develop their talents and skills, and
• to achieve the results and success through their work that will be recognized.

The combination of different values makes the main valuable orientation of people and the specification of desired career. This specification is a set of factors that motivate a person to work with maximum efforts and thus be satisfied with their lives, their work and the way in which the work is expressed and improved.

The commonest career specifications are:

1. Material values - preferred career brings financial security, achieving significant results and progress, the prestige and the ability to manage people,
2. Expression and the development of one's own personality - preferred career is achieved through the development of competence in the profession, and also the life style determined by career is important,
3. Challenge - the career that offers the opportunity to achieve something that most people consider impossible
4. Independence - career that allows freedom of control of one's own activities, and
5. Social aspects - a job that allows socializing and enjoying friendly relations with the associates.

7. CONCLUSION

Almost all of us are able to determine only one dominant specification, namely the foothold of the desired career. Research has shown that the specification of one's career in life does not change. This means that all of our business and life undertakings are usually guided a general "guiding star". It is up to us to disclose what it is.

It is important to also learn what we are like, in fact and what our personality is. What are our advantages and disadvantages? For what we are capable of and what is not our cup of tea? There is a whole series of questionnaires and tests that can help us in the examination of our own possibilities. Realistic assessment of previous experience is the basis on which we must build our future, and we must find the way to realize and satisfy our professional and personal ambitions.

We keep asking ourselves: "What do all successful people have in common?" It is certain that all of them wanted to be who they are. It is unlikely that you will find successful people who become successful by chance. Successful people realize the importance of setting right and realistic goals.

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RISK MANAGEMENT

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***Summary**: Tangible goods used for production, machinery, equipment and appliances, as well as natural forces and laws that affect them that allow the creation of more favorable life conditions are often unpredictable and destroy what man creates and, eventually, cause property damage and aggravate the chances for progress for a man, production companies and society in general. Economic damage that thus occur, impelled the scientists to examine the frequency of such damage, in order to minimize or remove them completely.*
***Keywords**: management, risk, process, identification, analysis, planning, control*

1. INTRODUCTION

Risk identification is the first step in a proactive approach to risk management. Figure 1 shows input, output and activities of the risk identification. Risk identification provides possibilities, ways of response and information which enable the team to identify important risks that could adversely affect the project. In order to identify risks, members of the team conduct a series of "brainstorming" discussions and open discussions to determine the importance of risk for the project. In order to facilitate this process, risk factors are grouped in various categories. Factors can be classified further into the categories such are factors of mission and objectives, decision makers, managers of the organization and available funds and costs. The objectives of risk identification are making the list of risks that need to cover all parts of the project. The risk identification (Figure 2) can be carried out according to schedule (e.g. daily, weekly or monthly), objective (in the project plan), or event (significant negative events in business, technology, organizational and environmental conditions). Activities of the risk identification should be conducted periodically, according to the goals determined by the type of project.

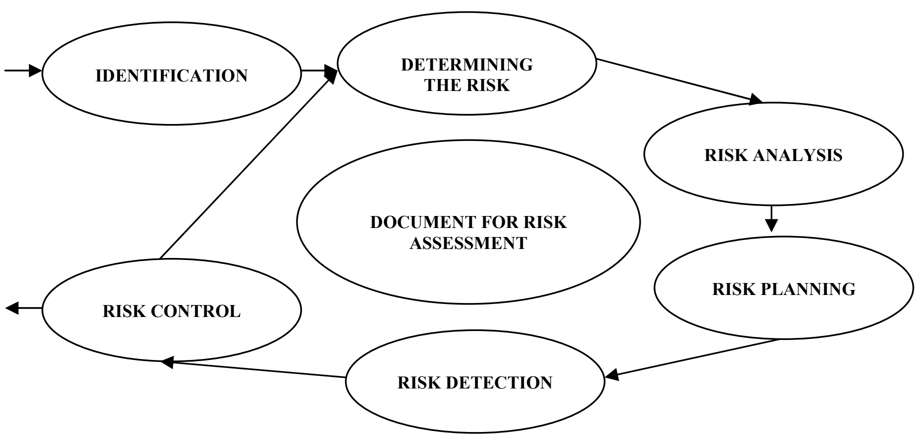

Figure 1: The risk management

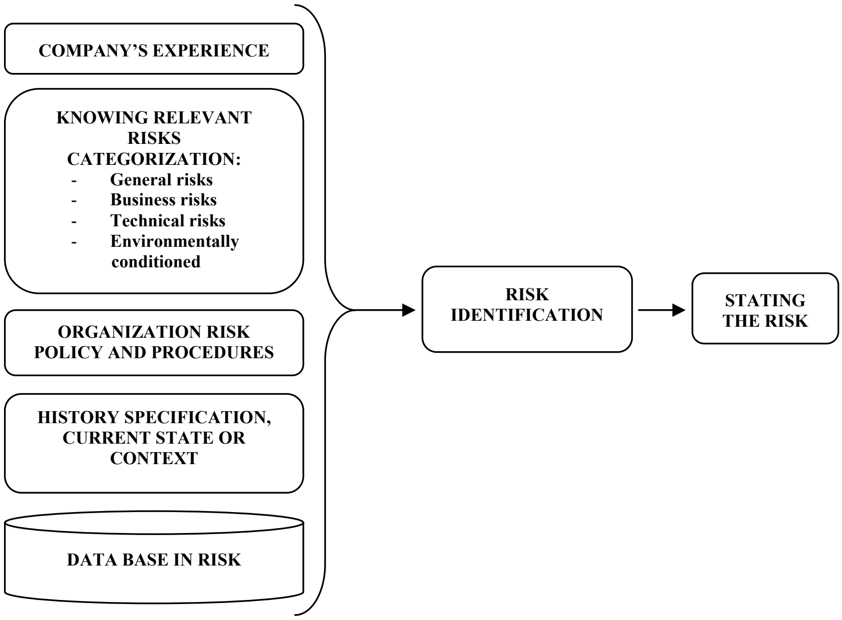

Figure 2: Identification of risk

2. RISK ANALYSIS

For any risk detected in a table of risk factors, its existence should be indicated and made a priority. Risk must be clearly explained and defined before managing it. When determining the risk, both the manifestations of risk and its causes and results should be taken into consideration.
For the development of e-business applications, risk classification during the identification of risk is necessary because it enables the creation of a database needed for risk monitoring. Within the risk identification, risk classification helps the team to determine the parts of the project in which the risk would occur and compare it to similar projects or previous experience. Creating a document is important for the success of the project because it allows one to monitor risks through all phases of the life cycle of the project.
Risk analysis involves the conversion of data about the risk into the form that enhances decision-making. Determining the priority of risk ensures that members of the team first consider the most important project risks.
In the risk analysis, the team examines the list of risks, makes the priorities and defines the "major risks" that will determine the resources for planning and implementing specific strategies. The team may also determine the risks that are not a priority so that they can be removed from the list. Inputs and outputs of this step are shown in Figure 3.
There are many quality and quantity techniques for the determination of priorities on the list of risks. Two of the most common techniques for the determination of the priorities of risk are: the probability and power of the risk. These indicators are used for the determination of the exposure to risk.
Probability of risk means the likelihood that an event will actually happen. Common percentage between 0 and 100 can be used for the ranking of risk. Only risks that have a probability per cent bigger than 0 are considered. Only risks of 100 per cent are sure, namely they are the problems. The scale using the numbers from 1 to 3 that match probability of 25, 50 and 75 percent is more efficient, because the arguments that make the difference between the probability of 60 and 70 per cent are usually not clearly defined.
Power of risk measures the strength of negative effects or the size of damage that may be caused by the realization of risk. Determination of ways to measure the obtained loss is not a simple problem. If risk affects financial losses then the measure can be the euro. Financial losses can be long-term costs in the implementation and support, reducing the representation of the product on the market, one-shot additional costs or the costs of lost chances. When the financial losses are understood, the risks can be put in categories from 1 to 5 according to their power, the most dangerous risks being put into the 5th group. High values indicate serious damage for the project, while the mean value indicates that the damage for certain parts of the project or reducing efficiency.

In order to evaluate the list of risks, the overall risk impact on the project must be taken into account. Sometimes the risks that have a high probability to be realized and little power, can be ignored. Also, risks that have great power and low probability can also be ignored. Risks that have both values high are subject to management. In the management process, either their probability or the power is managed.

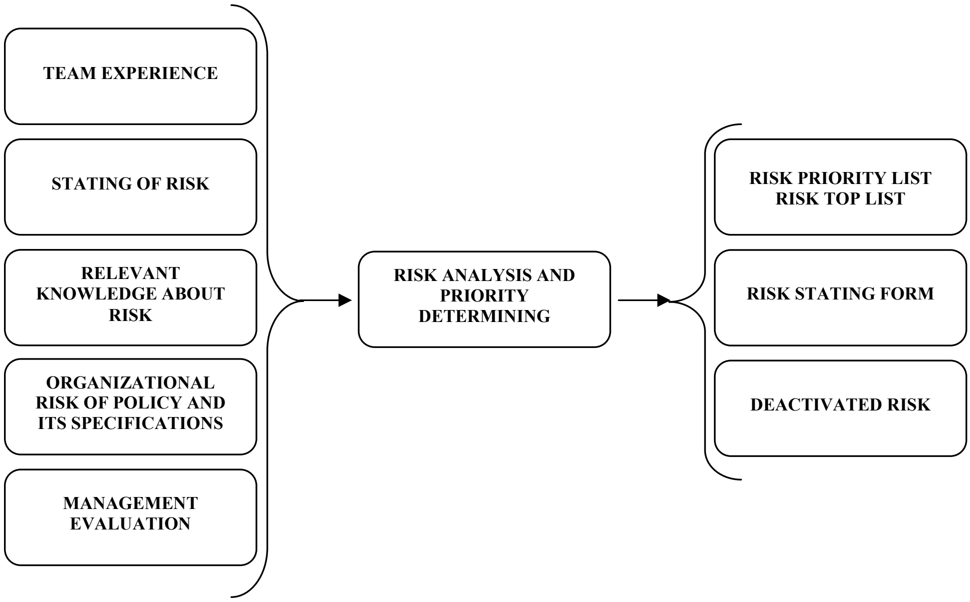

Figure 3: Risk analysis and priorities

The information about the risks are usually placed in tables or databases as follows:
- Risk identifier - Name of the risk uniquely defined by it,
- Risk source - Source may be determined by the central area (software development, infrastructure development), or by category (mission and objectives, decision makers) and factors (political influence, the stability of the organization),
- Circumstances - It describes the circumstances that lead to a loss,
- Consequences – it qualifies and quantifies the damage that will occur if the risk is implemented,
- Probability - describes the probability of occurrence of the damage caused by a realization of a risk. The probability is expressed by the values 1, 2 and 3 that correspond to 25, 50 and 75 percent, respectively,
- The power of risk - damage of the project that will occur in the case the risk is realized; it is expressed in euros or numbers from 1 to 5, indicating their intensity,
- Exposure to risk - includes parallel analysis of power and probability of risk. The result is obtained by multiplying the values for these two indicators,
- Content of the risk - used for describing the risk and problems in more details, and
- Risk connection - the list of risk identifiers for pointing out the interconnected risks.

After ranking the risks with regards to the exposure to risk, the activities should be directed towards the determination of strategy and the way to include plans about prevention in the overall vision of the project. Both simple and effective technique is also making a list of top 10 biggest risks for the project. All project managers must be familiar with this list. In addition, it is necessary to include this list into the vision document made within the first phase, as well as into the major plan project made within the planning stage; this is essential in order for the key participants to be familiar with these risks.

3. PLANNING RISK

In planning the risks, information about the risk are transformed into actions, Figure 4.
Planning the risks include planning the actions for each risk separately, the determination of priority actions, and creating documents for the assessment of risk.

The aim of planning the risks is to develop detailed plans for risk monitoring identified during the analysis, and to integrate them into the standard project management processes to ensure that they are completed. Figure 9 shows the process of planning the risks.

The planning should consider the four basic aspects related to each risk:

- Research - Do we know enough about the risk? Is it necessary to gather more information and determine the characteristics of each risk in better way before making the decision regarding the actions that should be carried out?
- Accepting - Are we able to face the consequences of the risk realization? Can the risk be accepted and can we go on without any further action?
- Management - Is there anything to be done that will reduce the damage if the risk occurs?
- Avoidance - Can the risk be avoided?

When you identify the risks required by the action, one of three possible actions must be carried out:

- Reducing the probability of realization of risks,
- Reducing the size of damage, and
- Changing the consequences of the risk.

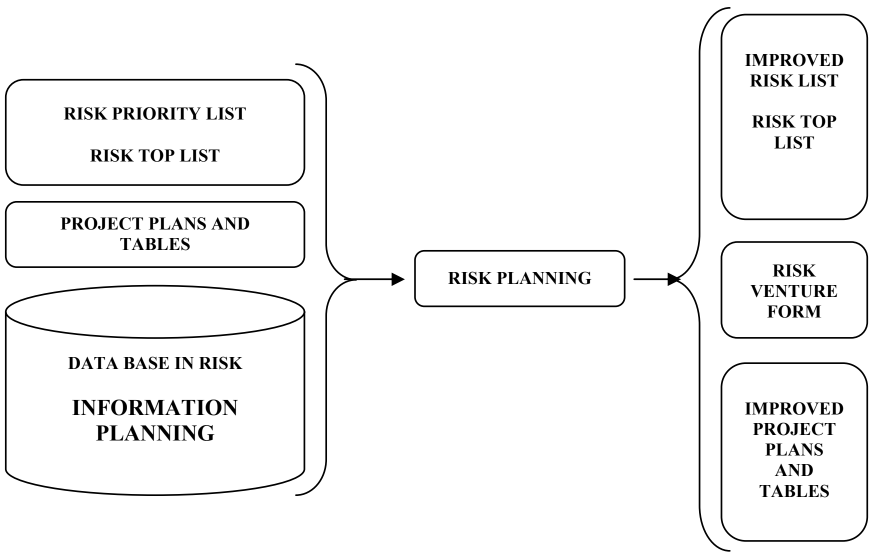

Figure 4: Planning the risk

In order to access the creation of the major plan of the risk assessment, it is necessary to identify several key concepts for each risk.

- Risk identifier - Name of the risk uniquely de
- Description of risk - the conditions that lead to the realization of risk, and the consequences thus obtained,
- Strategies for risk management - a description of actions to be taken regarding certain risks, including the assumptions introduced,
- Measurement of strategy success,
- The probability - describes the probability for occurrence of the damage caused by realization of a risk,
- The power of risk - damage of the project that will occur in the case the risk is realized,
- Exposure to risk - Exposure to risk - includes parallel analysis of power and probability of risk,
- Action - describes the actions that will be carried out in the management of risk. All activities will be included in the system for risk detecting,
- Deadlines - dates by the end of which all planned activities must be completed,
- The allocation of tasks – determines the tasks for each member of the team,
- Strategy of contingence - describes the plan that will be applied if the plan of action in the management of risk is not successful.

4. RISK DETECTION

Detection of the risk is essential for successfully defining a plan of action. It is a process in which the team checks the risk and actions to be taken in order to alleviate the risk. Reports of the risk status can identify one of four possible situations:
- The risk is eliminated, and the plan of action is over,
- Action are carried out as planned, in this case work on actions continues,
- Action are not carried out as planned, in this case measures for correction should be undertaken or contingency plan should be implemented, and
- The situation has changed significantly regarding one or more risk and it is necessary to do the revision of rating.

During carrying out of actions for risk management, total exposure to risk should be reduced.

5. RISK CONTROL

The fifth step in risk management process is risk control. This involves carrying out of the activities related to risk control. This step is shown in Figure 5.

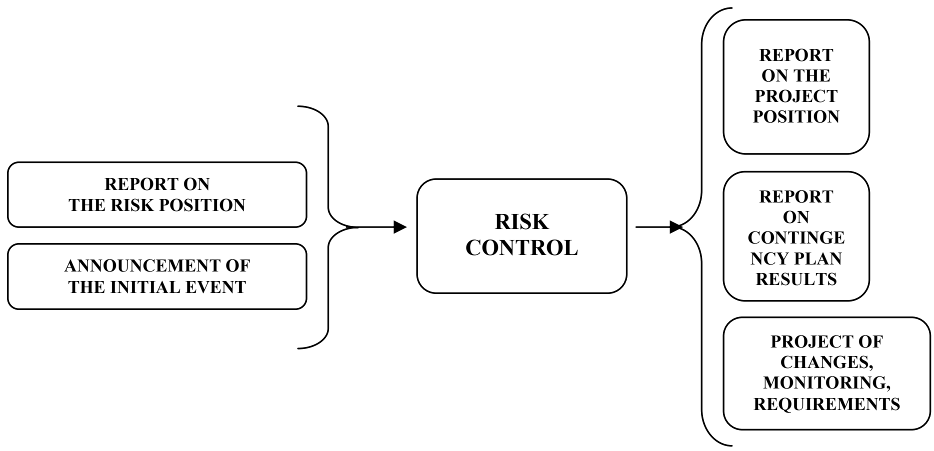

Figure 5: Risk control

After defining the values of risk drives, the difficult part of management is completed. Now the risk management is merged with the project management process which includes;
- Plan of action for the risk control,
- Corrections in the case of deviations from the plans,
- Responding to specific drive values, and
- Improvement of risk management process.

Learning from the risk is of strategic importance to the activities of risk management. Phase of learning is sometimes called the power of risk which stresses the value and significance the organization involves to improve the process of risk management.

6. CONCLUSION

Risk management, the activities and management access are directed towards the preservation of property and company's income, as well as prevention of the risk of loss, especially the random and unexpected ones. Risk can be reduced by performing preventive actions and improving caution measures, to allocate funds to pay for losses or to transfer risk to insurance companies, for example. This is an anticipation instrument of crisis management, which tends to increase security. Usually the goal is accomplished through risk analysis, measures to increase security, control over the risks.

Risk analysis recognizes and evaluates the risks for objectives and company's activities. Usually, there is a difference between the tangible and intangible risks: tangible ones are related to the risk of losses, and intangible ones to the uncertainty whether an event will cause gains or losses. After the goals and activities are determined as risky, the definition of the frequency and amount of damage of these risks takes place. Measures to increase security are mastered by the risks described or they are reduced. Monitoring of the risks is a permanent activity because they change over time, they come and go, and their frequency and value of damage are also changeable. The efficient management of risks assumes permanent education in order to deal the new risks with new knowledge.

The purpose of the risk management is increasing the risk transparency for facilitating the process of management and decision-making. Risk management gives clearer insight into the future and potential outcomes, opens new horizons and evaluates management goals and strategies with respect to the risks. Risk management is important for the wholeness of the company, it creates a strategic advantage over the competition. It does not upgrade business management process, but makes it more transparent and efficient.

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A SYSTEMATIC APPROACH TO E-BUSINESS SECURITY

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***Summary**: Information security management has a high priority in modern companies. On the other hand, the Internet is the essential tool for conducting e-business and it is concerned to be an open, non-secure medium. At first, Internet was not designed for commercial purposes, so it has no ability to handle secure transactions. In this paper will be analyzed security measurements for e-business. Also, some basic tools and measures which can guarantee security of e-business will be assessed. The purpose is to draw attention to the possible shortcomings in e-business security. Apart from that, the purpose and the benefit from the use of e-business will be highlighted.*

***Keywords**: e-business, security, computers, system*

1. INTRODUCTION

Given the fact that the primary purpose of the Internet was moving documents from one computer to another, and enabling remote access to computers, usage for commercial purposes has quickly increased with the development of the World Wide Web. Since it took a role of an commercial tool, developing safety measurements for the Internet and the World Wide Web was left unattended. This has led the Internet to become an easy-to-use network, obtainable for everyone, but not secure enough. New software and communication systems are developing rapidly, which produced users not adequately aware of abilities presented by nowadays programs and systems. As a result, users are unaware of certain software weaknesses which can lead to serious security issues.
Organizations have always regarded information as an important resource. However, nowadays, in knowledge-based economy, the importance of information both as strategic input and output has been emphasized. At first glance, it appears we have a situation that presents wonderful opportunity for global commerce: a global communication infrastructure that is very beneficial for low cost transmission of information and a global economy that is tending to be highly information-based. Along with this opportunity comes the challenge of information security. Protecting online assets and network resources has become a mission serious concern for executives and managers.

2. IMPORTANCE OF CORPORATE INFORMATION SECURITY

In today's Internet world, it is relatively easy to make, alter and transmit information. The advancement in computing capacity and interconnectivity has presented a situation where small efforts can cause potentially large losses. Both accidental and intentional breaches are easier and more likely to occur. This is a major challenge to businesses that intend to take advantage of the current information technology. Concern for information security is fairly common.

3. COMMON SECURITY THREATS AND E-BUSINESS SECURITY OBJECTIVES

There is almost an uncountable number of ways that an e-business system could be attacked by hackers, crackers and discontented insiders. Common threats include hacking, cracking, masquerading, eavesdropping, spoofing, sniffing, Trojan horses, viruses, bombs, wiretaps, etc. While the list of actual manifestation is long, conceptually, they are divided into a few categories. These are spoofing, unauthorized disclosure, unauthorized action, and data alteration. From a business aspect Denial of Service (DoS) attacks appear to be the most serious threat. DoS attacks consist of malevolent acts that prevent access to resources that would otherwise be available. Even though data may not be lost, the financial losses that could be incurred from not being able to provide a service to customers could be of much higher value.

In conducting e-business, every organization ought to be able to:

- positively recognize or confirm the identity of the party they are dealing with on the other end of the transaction;
- determine that the activities being performed by an individual or machine is equal to the level of authorization assigned to the individual or machine;
- confirm the action taken by the individual or machine and be able to prove to a third party that the entity (person or machine) did in fact execute the action;
- keep information from being altered either in storage or in transit;
- be sure that only authorized entities have access to information;
- make sure that every component of the e-business infrastructure is available when needed;
- be capable of generating an audit trail for confirmation of transactions.

Effective information security policy must have the following six objectives: privacy; integrity; availability; legitimate use (identification, authentication, and authorization); auditing or traceability; and non-repudiation. If these objectives could be achieved, it would lessen most of the information security concerns. Each information security objective is discussed below with emphasis on the specific challenges it creates to Internet mediated businesses.

4. CONFIDENTIALITY

Confidentiality involves making information available for only authorized parties, or restricting information access to unauthorized parties. Confidentiality concerns did not start off with the Internet. However, conducting business over the Internet has worsened the situation. To maintain the confidentiality of Web users' information, organizations have to find ways to keep the information from unauthorized view. From an operational aspect, that means information that is stored has to be secured in a way that it can only by accessed by authorized parties. Similarly, information in transit has to be kept from the view of illegal parties and that it is retrieved only by a legitimate entity.

5. INTEGRITY

Transmitting information over the Internet (or any other network) is similar to sending a package by mail. The package may travel across numerous trusted and non-trusted networks before reaching its final destination. It is possible for the data to be intercepted and changed while in transit. This modification could be the work of a hacker, network administrator, disgruntled employee, government agents or corporate business intelligence gatherer; it could also be unintended.

The need for accurateness of information in an information-driven society cannot be over stated. In general, information is either stored at a given location or being passed from one point to another. Either way, the primary concern for information integrity is that it remains whole so that nothing is added nor taken from it that is not intended or authorized. The extreme cases of lack of information integrity are when a whole database is missing or replaced with something else. Between these extreme cases are situations where data is corrupted either modestly or significantly such that major repairs have to be done to make it useable again.

6. AVAILABILITY

Availability means that systems, data, and other resources are functional when needed despite subsystem outages and environmental disruptions. Lack of availability is fundamentally loss of use. The most commonly known cause of availability problems is Denial of Service (DoS) attacks even though there are other common causes such as outages, network issues, or host problems. The goal is to make sure that system components provide

continuous service by preventing failures that could result from accidents or attacks. From a security aspect, availability is enhanced through measures to prevent malicious denials of service.
Closely related to availability and very important to e-businesses are reliability and reaction. Reliability implies that a system performs functionally as expected. Reaction is a measure of how quickly service could be restored after a system failure. In other terms it is a measure of system survivability. This does not automatically mean that the failed system is revived; just that service is restored or not lost at all despite the failure. One advantage for e-businesses is that the Internet, being a distributed system, affords a better opportunity for building redundancy into systems so as to mitigate denial of service problems. In fact, system survivability is at the heart of the design of the Internet and proper use of it should result in minimal availability problems. All the same, there are still real threats to availability.

7. LEGITIMATE USE

Legitimate use has three components: identification, authentication and authorization. Identification involves a process of a user positively identifying itself (human or machine) to the host (server) that it wishes to perform a transaction with. The most common method for establishing identity is by means of username and password. The response to identification is authentication. Without authentication, it is possible for the system to be accessed by an impersonator. Authentication needs to work both ways: for users to validate the server they are contacting, and for servers to identify their clients. Authentication usually involves the entity that presents its identity to confirm it either with something the client knows (e.g. password or PIN), something the client has (e.g. a smart card, identity card) or something the client is (biometrics: finger print or retinal scan). Biometric authentication has been proven to be the most exact way of authenticating a user's identity. Nevertheless, biometric processes such as scanning retina or matching fingerprints to one stored in a database are often considered invasive, and there always exists some measure of fear that this information will be misused.
The approach to authentication that is gaining approval in the e-business world is by the use of digital certificates. A digital certificate contains unique information about the user including encryption key values. These public/private encryption key pairs can be used to generate hash codes and digitally sign data. The authenticity of the digital certificate is attested to by a trusted third party known as a "Certificate Authority." The overall process constitutes Public Key Infrastructure.
Once an entity is certified as uniquely identified, the next step in establishing legitimate use is to make sure that the entity's activities within the system are limited to what it has the right to do. This may include access to files, manipulation of data, changing system settings, etc. A secured system will set up very well defined authorization policy together with a means of detecting unauthorized activity.

8. AUDITING OR TRACEABILITY

From an accounting perspective, auditing is the process of legitimately examining accounts. Similarly, in an e-business security context, auditing is the process of examining transactions. Trust is improved if users can be assured that transactions can be traced from origin to completion. If there is a inconsistency or dispute, it will be possible to work back through each step in the process to determine where the problem occurred and, probably, who is responsible. Order confirmation, receipts, sales slips, etc. are examples of documents that allow traceability. In a well-secured system, it should be possible to trace and re-establish transactions, including every subcomponent, after they are done. An effective auditing system should be able to create records of users, activities, applications used, system settings that have been varied, etc., together with time stamps so that complete transactions can be reconstructed.

9. NON-REPUDIATION

Non-repudiation is the ability of an originator or recipient of a transaction to prove to a third party that their counterpart did in fact perform the action in question. Thus the sender of a message should be able to prove to a third party that the intended recipient got the message and the recipient should be able to prove to a third party that the originator did actually send the message. This requirement proves useful to confirm claims by the parties concerned and to apportion responsibility is cases of liability. Evidently, this is a crucial requirement in any business transaction when orders are placed and both buyers and sellers need to be confident that not only are they dealing with the appropriate parties but also that they have proof to support the claims of any action taken in the process. Non-repudiation protocol is also of use in forensic computing where the goal is to collect, analyze and present data to a court of law.

10. CURRENT PROCESSES AND TOOLS FOR IMPLEMENTING E-BUSINESS SECURITY

One of the problems of the current e-business security implementation is that components of e-business infrastructure tend to be looked at individually and independently for security purposes. The current common "security policy" implemented by most e-businesses runs like this: collect a catalogue of threats and vulnerabilities and then shop for technology tools that alleviate those concerns. Security solutions are targeted at counteracting specific groups of threats and vulnerabilities. However, what is needed are complete solutions that will produce peace of mind to the business and trust and confidence in customers and partners. A typical three-tier e-business architecture comprises the client, web and commerce servers, and database servers. A systematic implementation of e-business security must ensure that each of these components is secure. This requires security policy and implementation at three levels: network security, system level security and transaction level security.

The current common e-business security practice translates into acquiring sophisticated servers, firewall software, intrusion detection systems, and obtaining digital certificates. We refer to this as the "latest gizmo" driven approach. While there is nothing wrong with installing these devices, the implied false assumption is that security risk problems can be minimized by that approach. We assert that regardless of how sophisticated the software and hardware devices might be, risk cannot be fully addressed without a systematic risk assessment and risk management process.

11. DEVELOPING CORPORATE RISK CONSCIOUSNESS AND MANAGEMENT FOCUS

In order for any security policy to work, there has to be a strong organizational foundation. The goal is to create a systemic organization-wide risk awareness and responsibility. Both top-down and bottom-up strategies need to deployed so as to generate a collective sense of mission. Both management and employees must have a keen sense of how their interests and the fortune of the organization depend very strongly on their ability to protect their information resources.

12. PERFORMING RISK ASSESSMENT

Risk Assessment is based on identifying threats, weaknesses and cost. A simple equation can be used to represent this process:

Risk = (Threat x Vulnerability x Cost of business disruption) / (Cost of Countermeasure)

Threat is simply the possibility of an attack (or possibly, inadvertent misuse). Vulnerability is 1 minus system effectiveness (which is a number less than 1). That means 100% system effectiveness will produce zero risk. Cost of interruption is a measure of what it costs to restore the system to full function plus any loss of revenue that may occur during the disruption period. One way to alleviate this cost is to build in redundancies. For the sake of simplicity, this model assumes that the effectiveness of a countermeasure is directly proportional to the cost of the measure.

13. DEVISING A SYSTEMATIC RISK-MANAGEMENT BASED E-BUSINESS SECURITY POLICY

The central point for any viable e-business security strategy is a sound well-articulated security policy. Documented security policy is the first tangible evidence of a credible and operational security system. Every organization that is serious about security must have a comprehensive and consistent security policy. The policy must address each system component, internal and external threats, human and machine factors, managerial and non-managerial responsibility. The security policy has to have as its foundation, the six objectives of e-business security: confidentiality; integrity; availability; legitimate use, auditing, and non-repudiation.

14. MONITORING AND REVISING THE SYSTEM

Implementing effective e-business security is a dynamic process. The technology is changing very fast and so are the threats and vulnerabilities. Creating a security and risk management culture is a time-consuming process. It is necessary to establish an effective monitoring and feedback system in order to determine the efficacy of each of these aspects of the security policy.

15. CHALLENGES AND OPPORTUNITIES

This proposed framework for information security immediately brings into focus some challenges together with some corresponding opportunities. The main challenge is that at this present time we do not have all the building blocks in place yet for an organization that wants to apply this framework to do so. In particular, the following issues have to be dealt with:

- Devising proficient and effective technology for monitoring vulnerabilities and identifying threats in a preventive proactive manner. This could be achieved by developing component-specific or threat-specific software;
- Developing software for information security risk management, similar to those developed for nuclear risk management, environmental risk management, or commodity price risk management;
- Identifying and implementing best practices in information security risk management – identifying the processes and associated metrics;
- Adapting traditional risk assessment and risk management strategies to e-business information security context;
- Pricing the risk of e-business information security;
- Instituting a new type of Security Certification Authority to certify and classify insurability based on the parameters of the pricing model above.

The present challenge is that none of these components is currently in place. In particular, there is an urgent need for further research into issues such as the most advantageous investment in security mitigation technology and strategies; the appropriate pricing of information security risk for the purposes of making sound insurance management decision; and how to systematically incorporate the behavioral element into a systematic risk management strategy.

16. CONCLUSION

The problem of information security in nowadays networked world is presented together with current common solutions applied to solve it. It is argued that the merely technological approach is not sufficient to produce trust or minimize risk so as to cause companies and their clients to conduct e-business with confidence. A risk management approach is presented. With the implementation of this approach, new financial security markets will emerge to handle the pricing and trading of this type of risk. Demand and supply of e-business risk insurance will lead to price detection and market efficiency.

Two conditions are necessary for this new approach to become effective: an industry standard needs to be set for what constitutes best practices in e-business security, and a new type of “Certification Authority” will have to be instituted to certify that an organization conforms to a set of best practices. These best practices and their certification will then become the standard upon which market prices for e-business insurance will be set. In the period in-between, the responsibility is on business leaders to take the necessary initiative towards a comprehensive e-business security policy for their organizations because the current technical oriented ad hoc approach is fraught with high business risk.

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RE-ENGINEERING OF BUSINESS PROCESSES AND E-BUSINESS

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Summary*: The aim of this work is to consider re-engineering of business processes, as well as the impact of e-business on the productivity of companies. In addition, attention is drawn to the fact that the company needed re-engineering to implement a special project, so that all participants in the redesigning process did their best. Also, it is necessary to pay attention to the fact that the company that ended the reengineering should regularly analyze redesigned processes and the newspapers all the time. The role of information technology and, of course, the management in the whole process should be taken into account.*

Keywords*: reengineering, project, e-business, redesign, process*

1. INTRODUCTION

Re-engineering of business processes (Business Process Reengineering - BPR) or business re-engineering is a process that relates to the improvement of company performance. The goal of reengineering is to achieve maximum improvement in the company. These improvements are made by redesign of business processes or the environment. Basic tasks of reengineering are:

- Research is directed to the active processes that give results;
- Processes are analyzed from a business aspect, especially from the buyer’s point of view;
- Improvements for which significant overall results must be given;
- Efforts in detecting the necessary improvements are focused on the implementation of information technology;
- The main idea of reengineering is to maximize performance and minimize costs, time duration;
- Working environment must be changed, along with other parameters.

Business reengineering is the modernization of business systems. It determines the structure of the business system. In this study, analyzed business reengineering will be described, which includes the development of inter-organizational systems. The main goal of reengineering is simplification of the organization and participating in the overall work. Simplification of the process reduces the complexity of the organization, thus improving its operations and performance, but it also increases profit.

Appearance and use of the Internet, brought a mutual connection, access to information in real time, and all is done through a simple user interface. By using the Internet, every company can communicate with their customers, business partners and financial organizations, meaning the majority of jobs can be completed online. This has created new ways of exchanging information between the companies, as well as a new way of conducting business and making agreements with business partners.

The basic idea of reengineering business is the creation of new values in the business that will be recognized in the market. Apart from basic functions, such as product sales, marketing and customer service, business re-engineering is focused on the secondary functions, such as order processing, management of supplies and warehouse and production.

Of course, it is necessary to connect the primary and secondary functions. In order to take advantage of the Internet, redesign of all processes at the level of the company must be done, but also redesign of the entire supply chain.

2. THE PROCESS OF BUSINESS REENGINEERING

In order for business re-engineering to be successful, it must be organized as a project, have a team, objectives, budget, tools, control points and deadlines. Process management and improving of the production process is the responsibility of workers, but is not clearly defined as work obligation. Therefore, it is more practical to realize this process through a separate project. There are five basic stages of the project:

- need to be moving the event, which will result in the project. This may be compared to the competition, the pressure of employees, customers or business partners, problems with performance, delay in the business. After identification of activator, various discussions and decisions about running the project take place;
- project usually begins with selecting the leaders of the project and the formation of the central team. After that, the selection process, which will be involved in redesign process, resulting in the formation of IT structures, in order to come to this stage of the budget proposal and plan;
- the redesign of business processes, using the benchmarking method to compare performance with other competitive companies; the most complicated phase of the organizational transformation in which the system adapts and changes the IT structure. After that, new processes are introduced and the training staff and solving individual problems (if there are any) start;
- Given that the business re-engineering is not a short-term job, after the completion of the project the situation should be continuously monitored, so that the process can be changed, maintained and improved if conditions require.

Business re-engineering in the construction of e-business can be divided into seven phases:

- Preparation;
- Determination of vision;
- Building model;
- Analysis model;
- Draft of action;
- Planning and implementation
- Evaluation.

It is possible that activities carried out parallel with these phases occur. Some of these activities are:

- analysis of consistency, correctness and completeness;
- Development of project plans and
- Making status reports.

Activities are assigned to project participants. Depending on the activities that are performed, it is possible to activate more options for each transaction that takes place in the activities.

It is usual to reorganize organizations by information system reengineering. Thus, responsibilities for each position are defined, based on the form and powers of access to important information, depending on the job.

Restructuring the organization is a process that needs determining which changes should be made as a result of the introduction of e-business. It must be seen to what level and what conditions it is possible to expect the integration process of the organization. There is a possibility that some jobs can be eliminated. The most important thing is to find the correct way to redesign jobs.

Implementation of e-business is the most direct way to business processes.

3. RE-ENGINEERING OF BUSINESS PROCESSES

Business process usually includes the following:

- observance of customers;
- cross-functional, cross-department and cross-company relations;
- information about the course of the process;
- knowledge created about the process;
- adding value to the processes;
- degree of structure process.

Business processes are changing by redesigning topology flows (material, information and knowledge flows). There are 3 basic ways of a redesign:

- restructuring and re-configuration process;
- change the flow of information about the process;
- change management knowledge about the process.

Process redesign is based on few principles. The most important thing is awareness of the minimal loss of time, but it is important to simplify the process and to consolidate similar activities. Process redesign is expressed through the following principles:

- remove the waiting time between processes, in order to create new value;

- fastest and most powerful companies need to do a job;
- adaptability process always and everywhere;
- synchronization of physical and virtual parts of the process;
- presentation of information in digital form;
- provide new information on the status of the process;
- set processes using constantly active sensor;
- setting up feedback that causes action;
- use interactive analysis and synthesis, in order for process to lead to the creation of new values;
- intelligent acquisition of knowledge and skills related to the process, which can be used later
- personalization process in relation to the habits of the project participants.

The first phase in the process of reengineering is the identification process that needs to be redesigned. Processes are usually poorly known, and even less documented. The reason for this is that workers know the processes as much as is enough to work in their workplace. If you observe a number of related companies, it can be perceived that the processes are even less known. It can be noticed that there are processes that are not directly related to the company and do not participate in its work. It is necessary to remove these unnecessary processes from the company, in order not to be accidentally included in automation, which arises from reengineering.

Of course, first the most critical processes are automatized, with complete analysis of each of them. The introduction of e-business usually has a direct effect on the reduction of the number of processes in the organization. Job overviews increase, a response time of the companies significantly reduces.

It is necessary to opt only for re-engineering process, which participate in the total business, while the others should be canceled. It is not desirable to waste time on the re-engineering process that will not sufficiently affect the improvement of overall company performance.

When the re-engineering is carried out correctly, it usually comes to reducing the need for many participants in the performance process, and also to the reduction of the number of organizational units, and even the number of tools to participate in the production process. Information technology allows you to provide centralized look over redesigned integration process.

Monitoring mechanisms in the organization are improved by individual processes' structure, and not put on its end. These controls are installed in the automated process, which is also implemented through automated and almost complete control over the execution of one job in all aspects of importance for the organization.

Change is made of horizontal and vertical compaction process. Adjacent processes are horizontally connected. After this reengineering, managers need to be able to envisage a complete picture of business processes that make up the system. It is important to note that the manager should not only supervise and control, but also to assist in the process of decision-making and the development of the project.

Analyses indicate that, after reengineering of organizational processes, the number of hierarchical level is reduced in half, and the number of managers in the third. Then the organization of business based on the knowledge of experts, who independently perform various tasks.

Information flow is also important. After reengineering, flow of information will be reversed. The main goal of data processing will become the way of forwarding information from the top to the bottom of the organizational pyramid.

3. CONCEPTS OF E-BUSINESS IMPORTANT FOR RE-ENGINEERING

Exchange data between business partners is usually electronic. Then the re-engineering focuses on the restructuring of information systems, in the restructuring business company system.

Internal database of each of the participants in the e-commerce should be composed of two parts:
- the first is the business structure of the organization;
- the second is the history of the state of the business system.

In this way, there are two basic types of transactions: one of it involves the business definition of transactions for exchange of structure of the business system between the two participants, while using the transaction of business operations enables information exchange that depends on the state of the business system.

4. CONCLUSION

Problems that usually arise during the reengineering in 20% of the cases are technological, and 80% are organizational. Solutions to technological problems are almost always available on the market and such problems are much easier to solve than organizational problems. Due to strong influence of human factors, organizational problems do not allow the simple application of existing solutions. In order for redesigned system to successfully operate, it is necessary to realize the full automation of the exchange of messages in all key areas of e-business.

In order to achieve full integration of applications and information system, certain requirements must be met:

- a unique approach in handling internal and external messages;
- system should enable management of different types of messages (E forms, e-mail, EDI, private documents, the local data);
- timely notification of errors, high-priority messages, delay of feedback messages;
- interface should have intelligent direction of messages to the intended places, without user intervening;
- level of security that is required in the business must be realized in the interface, and
- to provide full automation in the internal environment from the interface requires connection of message with accounting, taxes and fees, audit, archive and procedures for recovery in the case of forced outage

To achieve full automation, it is necessary to reduce procedures to the model in which decision-making is made by information systems, because the delays that may arise due to the bureaucracy of scheduling business functions can endanger exchange of business documents in a work. Methods of approval of business functions are replaced with the so-called user stamps, i.e. information on who created or changed data transactions, and when it was done. On the basis of these data, it is possible to determine the responsibility of each user separately, and in the same way you can see the competence of persons who are at the top of the organizational pyramid.

During the integration of e-business with application systems with various business partners, there are many problems that must be solved to enable the introduction:

- leadership, which has influence and control in a single organization, not in a position to make decisions when they are out of organizations, so the decision-making is much more complex;
- development of cross-organizational relations requires overtime work of many business partners;
- information from the information system can be exchanged with different partners in different formats, which brings more complexity;
- there is often the need for interfaces oriented towards various communication systems, hardware platforms, operating systems and software applications;
- there may be the need for data that are not recorded in the internal information system, which imposes additional development efforts and increases the complexity of internal system.
- In areas in which information systems are projected, business terminology established, which is necessary to realize the system of e-business. Therefore, it is very important to create a unique terminology for all participants in the development, which will be included in the common vocabulary of terms.

Life cycle of development, presented by a well-known method, usually faces deviations due to the needs of the parallel and often contradictory tasks. However, these jobs must be done to meet the needs of business partners, which increase the complexity of the project and its redesign.

The boundaries of the system receive a high degree of uncertainty, because it is necessary to determine how long to go in changes in order to meet the high demands from external business relations

Before you begin the process of re-engineering it is important to analyze in what condition the company is. It is necessary to resolve a major dilemma: whether and how, upon completion of process reengineering, the situation in business process will be improved?

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VIRTUAL ORGANIZATIONS

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***Summary**: Virtual organization is a group of legally independent organizations that cooperate so that potential clients are provided with shared service group and functionality as one organization. These services and the functionality are usually implemented through a unique Web presentation on the Internet, which, depending on the choice of a potential customer is the further connection to the organization, according to the agreement members of the group, need to take over further work. One example of virtual organizations are international transport organizations in a number of countries with access through the interface dependent on the country from which the service is required.*

***Keywords**: virtual organization, re-engineering, management, structure, concept, leader*

1. INTRODUCTION

Group of organizations formed virtually can be dynamically changed, but its composition is clearly defined. There are long-term and short term consortiums of virtual organizations. On the other hand, one organization can also be in the number of virtual organizations.
There are two basic internal organization of virtual enterprise:

1. Federal model of decision-making by consensus between the partners by negotiating with respect to key information and requirements for reporting in the organization, which can bring significant slow downs,
2. Benevolent monarchy implies the existence of the leading partners that defines the categories of information and reporting structure.

Significant application of this concept came after the formation of computer networks that have enabled cooperation at the global level. Collaboration platforms are defined as groups of methods and tools in the integrated information environment that support cooperation between the organizations. Virtual organizations are dynamic structures of cooperation construed to raise the creativity and competitiveness so that their competence unites in a chain of organizationally linked computer network.
Although they look like a unique entity on the outside, virtual organizations are, in fact, made from various autonomous units, which can be located in different countries with different legal, cultural, organizational and other systems, which obviously affect the development of information infrastructure, virtual organization and leads to application of new methods.

2. VIRTUAL COMPANY - RE-ENGINEERING PRODUCTION PROCESS

Development of information technology in the developed countries resulted in the entry to the new era of radical change and surprises. The changes resulted in the creation of the information society in which the changes are not only technology, but also society forces that characterize society and their relationship. Companies resist all the changes that occur in society and in the environment it is necessary to send these changes and to adapt to new situation. The new approaches to business, new models of organization and their business processes in which the key role of the application of computer game. The purpose is to adapt to survive in the market, and it is necessary to be competitive.

Research in the reshaping of business and process changes have enabled better understanding of the key elements of competitiveness. At the same time, the leading company that measures the performance of world class improves the competitiveness through the continuous development of business processes by creating the appropriate environment that is able to immediately adapt to market changes.
The market used to be local, national and international in character, but today it is global, and controlled by purchaser and not the manufacturer. Global market creates a new business paradigm. This paradigm transforms company oriented to the buyer. The aim of this paradigm is to achieve the competitiveness of companies in the global market by increasing productivity while taking into account that the buyer is satisfied with the product and in accordance with the available price. Re-engineering of business processes is one of the ways of reshaping which changes its structure according to this paradigm. Reengineering era is present in the developed countries, but is not much studied and applied.
The introduction of a new structure of the companies which are based on flexible modes of production creates new types of companies - virtual corporation (virtual enterprise). These are old companies with a new way of doing business, which is achieved through reengineering. The term ‘virtual’ here indicates that the company is not only what people see (Figure 1).

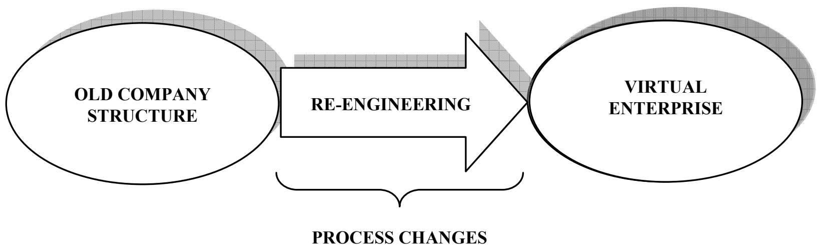

Figure 1: The process of change companies

The term Re-Inventing the Corporation is introduced by John Najzbit in 1989, although the terms such as: reshaping, restructuring, transition, reconstruction and redefining the organization, were used. At the end of the 90’s, concept of reengineering prevailed.

3. FEATURES OF NEW ORGANIZATIONAL STRUCTURE

Various products or services over time change a craft way through the production of industrial technology in today's information technology. These new technologies have enabled the products to be produced at any place at any time according to the customer wishes.
To achieve this production it is necessary that employees be adequately trained and educated. They must have rapid adaptation to changes, to use new information and skills work in teams. This means that you have the ability to continuously learn and develop.
One of the characteristics of virtual organizations (companies) is a competitive engineering. This is significant because the company focuses on the needs of the customer. Employees together with customers work on the development of new products. This creates agile and flexible production (flexible manufacturing system of production and CIM).
Key components of virtual organizations are databases that provide a distributed, competitive access, the tools for electronic commerce, negotiation, brokering, electronic payment services, banking, financial management, banking and security.
Tools which are the subject to analysis, optimization and implement models of business processes are a key part of virtual organizations. The basic concept of virtual organization is based on the integration and cross-efficient methods, tools and technologies, both in the approach to the outside, as well as the internal organization of work. One of the leading projects that define the information infrastructure for virtual organizations with distributed architecture that uses the group tools based on the leading information technology and standards is called the Vega (Virtual Enterprise using Groupware tools and distributed Architecture). The most famous virtual organization, a virtual bookstore is Arizona.com, which is able to, along with its members, provide more than 400,000 titles of books that could be delivered within 48 hours.

Virtual shops, as a special case of virtual organizations, providing home purchasing through interactive created order, are supported by multimedia technology, so that the information on wholesale, discount, warnings, and instructions are available. Promotion campaigns - One of the well-known systems for the development of virtual stores developed by the Oracle Company under Nazi Internet Commerce Server, which is selling fully personalized.
The project Infocities, who initiated the cities of the European Union, are defined with the application online and access to services to:

- virtual database with consulting for education, culture and health,
- virtual city allows visual impressions map for tourists, business partners and potential investors,
- virtual education and remote training,
- electronic commerce for small and medium-sized enterprises,
- public debate allows virtual form of debate, which promotes democracy,
- utility information with the public, urban, transportation, health and other information,
- health services supported by virtual calls and the management of data from health records.

Information system that supports a virtual organization should be composed of the following components:

- Knowledge Management ensures obtaining, creating, monitoring and distribution of the main, structured data and the performance of the organization, and data handling of non-structured ones (business documents, e-mail, Web pages, etc..) and the disclosure of hidden data and information,
- Supply chain is used for planning and execution of the tasks set in the supply, with the cooperation with the production, logistics and distribution subsystems integrated in information system,
- Customer Relationship Management and Marketing consists of applications that are used for connecting with customers, from marketing and sales to service,
- Virtual Enterprise is narrower set of applications for the implementation of e-business in the open, global environment, used for conducting financial transactions, the current security personnel support, payments, and management projects that are in progress,
- Active procurement is used for a faster return on capital investment based on the automation of the processes that were based on paper documents, as well as cooperation on the basis of the highest management of the organization with intermediaries, suppliers and logistics organizations in real time,
- Active Foundation - virtual organization consists of integrated development tools, advanced pre-business environment and facilities for the efficient development and maintenance of software that automates the above components.

4. VIRTUAL COMPANY CONCEPT

Each company has its own life cycle phases of the creation, development and ending.
Characteristics of these concepts are:

- Spontaneous creation of the elements of conception,
- Crystallizing of concepts,
- Intensive development of concepts,
- The effectiveness of the concepts,
- Making concepts' patterns,
- Inadaptability concepts, and
- concepts of ending.

Figure 2 shows a parallel life cycles of the relative scale in which 100% of the concepts are used by one specific part. We can see that there is actually a particular conception of the company.
One of the century concepts affect both external and internal factors. External factors are unresolved existing problems that result from changes in society. Internal factors that influence the creation of concepts are:

- Science;
- Technology;
- The level of social needs;
- Human resources (the level of knowledge, skills, working ability, creativity, mobility, etc.).

New concepts companies emerge on the basis of new ideas:

- A man who is a center of production and the consumer of the product,
- The value of the material and other value products,
- Function as a link between needs and products,
- Processes as concrete events,
- Enterprise,
- Multidimensional networking, and
- Team work.

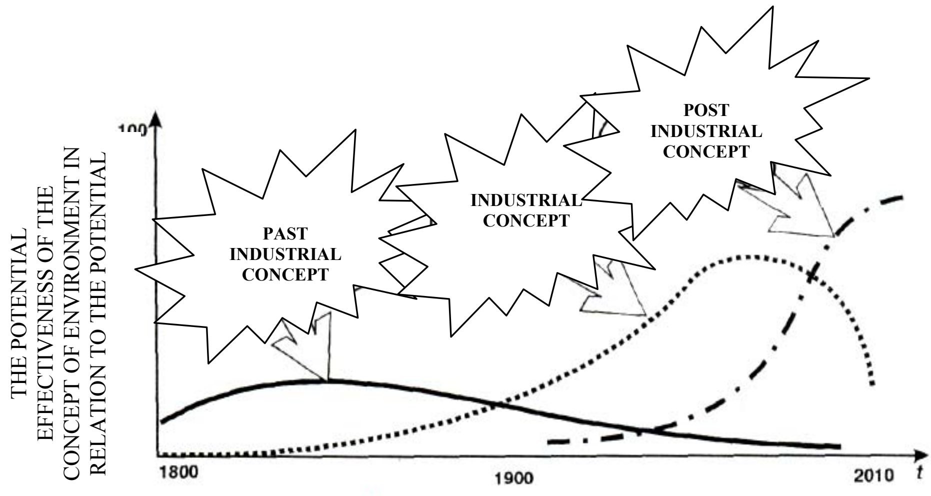

Figure 2:

Reengineering process is a fundamental factor of the activation ideas for the creation of new concepts companies. So the question is: "How a new company would be created in current circumstances?"
The first and basic thing in the creation of departure is his purpose. It must have a purpose of which is reflected in the production value for your environment. The company creates value of their behavior, i.e. the processes.
Applying the principles of reengineering in a contemporary, creative and appropriate procedural company with latest information technology requires sets of the principles, and they are as follows:

- The company's mission,
- Values that are created in the process of companies,
- The company can achieve success only with superior processes,
- Superior performance is achieved through well designed process, and
- The right people in the right environment and with logistic support.

5. VIRTUAL COMPANY STRUCTURE

In a classic vertical organization (company) groups are organized by functions. There are departments, sectors, etc. The horizontal structure of the teams is organized by processes, where there are owners of the process. For quality performance of the required professionals, they are creating teams for the new process, and after that they become perpetrators. Trainers supervise them. The role of a trainer is to prepare professionals for team work to give the maximum of their performance in reengineering team as well as in a process team.
The task of the trainer is to ensure that people in the teams perform tasks by the latest knowledge and skills as well as to be able hard creative work, both physical and mental.
Leader is a member of top management. This is a person who uses his authority and power to initiate all the vital resources that are necessary for the project which is done in the transformation. In addition to the leaders, the most important role has a trainer for re-engineering, who develops methods and techniques of reengineering and care for all members of the organization in time to meet these techniques and methods.
Shows only visualization of the new business enterprise. Classical schematic hierarchical view is no more used, because classification, authority and power are lost. Classic concept disappears. At the top of the processes with their owners and teams, there are professionals who work with the team. Heads of these organizations are the owners. Buyer in such a structure is the main chief, for he dictates policies on production and the formation of products.
In an average organization of a rigid management structure, a link that integrates components of the organization is needed. The leader of the organization has a strength and ability to successfully give directions employees.
The leader has various roles. One of the roles is the integration of parts of companies in general. Apart from this, he has another important role, to motivate the employees. He influences the creation of the attitudes of people, way of thinking, their contribution to production, which must be credible and consequent. The third role of leaders is reflected in the purposeful allocation of resources. It means that he is the trainer for the owners of the process, and the owner of the management process.

Characteristics that the leader has are different from the ones of the classic top managers. He has the wisdom, enthusiasm, accepts criticism and listens to employees and if necessary, criticizes. Simply, he is dedicated to the company.

6. CONCLUSION

Virtual organizations are dynamic structures, and their life cycle can be very short. The quick and quality response to contemporary changes and meeting demands of consumers show that the virtual organizations have large advantages over other types of organizations. In order for a company to resist all the changes that occur in society and in the surroundings, it is necessary to send these changes and to adapt to new situation. Virtual organizations today have a defined topology, life, dynamics, cross-organizational information systems, etc. and what makes a modern organization ready to respond to changing market demands, and with the maximum savings in the cost of a different nature.

New concepts of companies emerge on the basis of new ideas: a man who is a center of production and the consumer of the product, the value of the material and a number of other value products, function as a link between needs and products, processes as concrete events, entrepreneurship, multidimensional networking and team work. Reengineering of process is a fundamental factor for applying ideas for the creation of new company concepts.

The application of the principles of reengineering is a contemporary, creative and purposeful process in a company with latest information technology.

The re-engineering principles are the following: company mission, values that are created in the process of companies, the company can achieve success only through superior processes, superior performance is achieved through well designed process, and with the right people in the right environment and with the logistical support.

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MODERN LEARNING FROM THE ASPECT OF WISDOM MANAGEMENT

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Summary: *In order to provide systemized knowledge of management, new disciplines like wisdom management are essential for adopting new business practice. Wisdom is based on affirmation of 'minds' competition. The age of 'minds' industry – new material, IKT (media) education and like, rule the world nowadays; they do not have their natural environment because they may exist everywhere on Earth. Understanding IKT's influence is significant, having in mind that IKT has become powerful participant in the process of education and that it makes so-called triangle of education activity altogether with school and family, with a student in its centre. Models of contemporary education activity are changeable. Solution can be found in the concept of 'media literacy'.*

Key words: *wisdom management, intelligence, IKT, media education, education models*

1. INTRODUCTION

It is very significant to know the fact that, in successful companies, 70-80% of business is done by intellect. This percentage will be increased in future because it is obvious that competitiveness of the organization will depend mainly on their intellectual capital. Organizations should have people who can respond quickly, which refers to '*employees of knowledge*'. '*Employees of knowledge'* are well paid because new jobs require high degree of formal education and ability to adopt and implement theory and analytic knowledge. This requires a new approach to work, as well as different mental structure (*continuous learning*). Creating of knowledge society has started long time ago. Employees of knowledge will not represent the majority in knowledge society, but they will be the biggest group of citizens and manpower in many countries.'

New society profile, through character and leadership, will be provided by employees of knowledge. Knowledge society will inevitably become far more competitive than any other known society, due to the fact that using IKT makes world knowledge more accessible than before, so there are no reasons for not performing given assignments. There will be '*poverty countries'* no more, but only countries of ignorance. This is related to organizations of every type, as well as individuals.

2. MODERN LEARNING FROM THE ASPECT OF WISDOM MANAGEMENT

Knowledge is a product of individual, group or many cultures that gather information through experience and long periods of time. In order to understand problems, possibilities and processes better, as well as to find better solutions, acquired knowledge must be compared to other knowledge. Accumulated knowledge is prone to evaluation in comparison to the ethics, responsibility, experience and scientific-research work that leads to wisdom. People can pass on knowledge by modern technologies and IKT, but the wisdom remains the exclusive property. In order to provide deliberate and systemized knowledge of management, adopting new business practice requires new disciplines.

Wisdom is set of truths acquired by mind, perception and experience, implemented in life. Wise manager is the one who perceive everything in his environment as related events rather than separate ones, as much as he can,

with every associated detail. Although it is not the complete wisdom of life, it is certainly one of preconditions for acquiring it. However, the misfortune of mankind is that wise people are usually frightful, ignorant ones are brave.
Manager must give a small and deliberate talk to be wise. Wise manager needs only small amount of words. Wise manager thinks about every detail, but only emphasizes things that are reasonable and resistant. Wise manager must think in advance, looking further into the future.
Prudent manager is the one who dedicates time to care and thinking. Prudent manager is not prone to danger due to his carefulness. Intelligence is the basis of wisdom. Nowadays, intelligence is thought to be conventional name for characteristics, predispositions and abilities that, in certain situations, result in reactions of successful adapting.
There is a question about which type of intelligence can provide the solution:

- Rational
- Emotional, or
- Spiritual.

Rational intelligence (*IQ*) is attributable to people, but IKT is the most perfect in this type of intelligence. Rational intelligence helps us solve logical problems. Emotional intelligence *(EQ*) makes us more aware of own and other people's emotions, it helps us feel empathy, judge the situations and respond in the right way. Spiritual intelligence (SQ) implies all known types of intelligence. This type of intelligence makes our life be put into wider, richer and more conceived context, and by it we evaluate whether certain method or life path is more conceived than other ones.
Basis of wisdom is affirmation of '*minds*' competition. The age of '*minds'* industry – new material, IKT (media) education, rule the world nowadays; they do not have their natural environment because they may exist everywhere on Earth. That means that everyone can participate in competition for its conquest if he/she is capable of organizing enough number of smart *'minds'* to do it. In competition for conquest of new industries, organizations do not use the same strategies, but it is quite certain that all players have the same starting point when it comes to that. Dominant weapon of organization competitor in 21st century will be education and ability (*skill)* of manpower.
One of the basic starting points of competitors in the future will be skillful manpower that could manage high-technology processes for low costs. It should mean that product innovation will not be so beneficial unless there are processes that enable organizations to become the manufacturers with the lowest costs.
One who only uses mass media without prior understanding of a/m will be used by their masters – '*hidden communicators'* at the other side of offices, antennas and glittering screens. Underdevelopment of adequate education is not coincidental and it fits into general crisis of humanistic education everywhere in the world. Education system must teach students and pupils to observe media in critical, intelligent and wise way. Trained, educated audience would, without doubt, have positive influence on standard of contents on the Internet.
Objectives of education for media suggest creating of critical attitude towards mass media and developing of abilities to express through media. The aim of education for media is enabling critical reception of media messages, ability to face the messages with one's own opinion and experience and resistance to clichés.
Solution could be found in previously mentioned concept of '*media literacy'*. It suggests learning about media through media, and the basic postulation for its realization is existence of set of abilities of '*successful evaluation and creating of resistance towards complex situations, successful choosing in media-overfed environment, acquiring the feeling of various aspects and respect of a/m, acquiring the skills of creating and sending messages, work in the efficient team and community, successful utilization of family, social and cultural connections and setting of purposeful individual goals'*, namely ability and skill for knowledge approach, choice, orientation, critical distance, operational ability, esthetic perception and assimilation. Thus, knowledge approach is perceived as ability of media use, message decoding that are transferred via knowledge, and possibility of experiencing transfer. In this concept, ability of making choice assumes existence of knowledge about relevant criteria and structures, while the ability of orientation assumes distinction between reality and its ideal presentation through media.
It is possible to decide on critical distance as an ability of evaluation and judging media development and check of possible degree of technical benefit that modern media have in both individual and social level.
Operational ability suggests possessing knowledge and skills in order to improve communication with utmost use of media technical possibilities. Esthetic perception can be understood as ability for understanding of images and specific sequences, while the ability for integrating can be understood as integrating of media and communication that is thus achieved in existing network of social relations and reflections of media use on the society. Basic precondition for adopting and realization of this many-sided conception presents professional development and improving of pedagogic and androgenic staff.
Education for media in some countries is understood as a part of common education and is thus specified in laws on education. It comprises various aspects of media activity: contents, basic starting point, information value, and possibility of manipulation, tasks and obligations, intentions of '*media creators'*. Tasks of education for

media imply also the request for providing actual idea about media and its possibilities to the students, as well as risks media can bring. Students must get qualified for differentiated and thoughtful media use for purpose of informing, extending general knowledge, rationalization, enriching their own activities, communication with other people, as well as fun and relaxation. Education for media, in opinion of German pedagogues and specialists, must not be '*pedagogy of protecting students from media'*, but should have a say in '*scaring away'* and critical relation towards technical media and to enable conscious, responsible media use. Education for media and mass communication is regulated in most of the countries of modern world, especially thanks to recommendations of *UNESCO* in statutes and laws and number of by-laws in area of education – educational, informing, culture, science, and child protection.

In the area of education, education for media is regulated as an integral part of modern general education. Most mentioned goals imply '*creating of critical attitude of students towards mass communication and developing the ability of creative expression through media'*, as well as '*developing of critical reception ability of communication messages conveyed by media, and enabling communicating.'* Ministry of education and other government bodies, as well as respective science bodies of universities and faculties, have the obligation to provide media and communication component of modern general education and culture to all young and adult members of the society.

In the Statute of Republic of Serbia, Law on public informing, laws that refer to primary, secondary, higher and high education, there is not one outlook on the right of education for media and mass communication, namely enabling critical reception of products of mass communications and for creative participation in mass communication media. This suggests the need for specifying the right for education and enabling critical reception of media messages and creative partaking in mass communication media through Statute of Republic of Serbia and respective laws and regulations.

In order to duly use IKT in learning process, adults need to be provided with access to technology and technological products (*at home, at work, in the society*), it is necessary to develop competence and relaxation while working with IKT, it is necessary to carefully choose the aim that will be gained with IKT and for which learning contents IKT provides good quality results.

Research on effectiveness of education in developing skills of self-learning, including use of technology, has proven that nothing besides talking was done about it. Students show low level of readiness for self-directed learning. There is a great reliance on teachers as persons who run education. IKT use (*especially Internet*) is not used as a help in education, thus not developing as a skill of self-directed education.

Influence of modern science, technique and overall civilization changes in education happen without any doubt. Science-technological revolution is a modification of global dimensions. All subsystems and departments of society system are under its influence. Furthermore, education is adjusting to these changes on the inside. Process of internal adjusting of education to IKT technical possibilities does not only refer to piling up new technological contents, but also to readiness to allow new methods and new spirit of education. '*New discoveries and innovations in one lifetime make the things we have learned in school inadequate; rules we acquire in our childhood hardly comply with big events that will happen when we grow up'*.

Nowadays we deal with disintegration of the education basis in which centre is slow (*static*) printed culture and suitability of new education that is based on quick (*dynamic*) electronic image. Just like since occurrence of *Gutenberg* press uncontrolled printed word has been spreading anarchically, today also TV and IKT programs extend anarchically. Printed media (*libraries as traditional data banks*) no longer exist as major ones, and in comparison with possibilities and power of new IKT they become second-rate method of collecting and dissemination of information; instead of printed culture, that centralized information control, electronic information system decentralizes and individualizes information.

Education department accepted the challenge of micro-electronic revolution. Learning with IKT symbolizes special type of learning; it is individualized and auto-didactic by its nature, because in it student guides himself through material with the help of IKT that tests comprehension and adjusts learning speed to student's abilities.

IKT plays an important role in adults' education. Advantages of using the Internet in education involve its potential to rouse interest in students, easy way of communication and idea exchange, openness to new sources of knowledge, potential development of connections with people around the world, as well as possibility to interact with experts. Huge amounts of information exist on the Internet; they are available 24/7. The Internet enabled easy access to information of all kind to an average person. Thousands of libraries set their catalogues, thus enabling searching and providing books from remote places.

Information search on the Internet, sometimes very exhausting task, has been made easy thanks to development of search applications. Possibility of searching on the basis of key words or topic provide finding of required information in short time. The Internet exceeds geographic limitations. Programs offered on the Internet could be the only possible option for students in far away locations. For others, Internet enables choosing between programs without losing salary due to change of place of living. Many adults have family obligations that unable their being present in classrooms. Possibility to overcome geographic limitations and accessibility for education anyplace, anytime, is the key issue for many adults to continue their education by using IKT.

Traditional roles change, Internet changes the way adults gain education. Information search is not limited to libraries anymore, thanks to new, smarter programs for searching. Much information on the Internet can be sorted, evaluated and used easily. Adults no more have to limit their educational possibilities to places near their homes or working places, because they have the possibility of distance learning. Internet removed many traditional geographic barriers.
Thanks to the new reticulation, every type of data can be transferred and processed easier than before; future market will be market of program and information. Now it is possible for all places worldwide to exchange any type of texts, charts and images, animated or fixed that are accompanied by non speech, or music. It is the final range, omega principle of IKT society: '*everyone can have access to everything, anywhere, anyhow and anytime*. That is the great danger for safety of information!
There are three ways in which computer can be used in process of learning for adults:
- it can be functioning as a machine for learning that presents contents, provides exercises and encouragement;
- it can be used as means of studying for construing and developing new ideas, e.g. Word processors; and
- it can be used as learning resource, source of information if it is connected with communication networks.

Basic feature of education is no longer a teacher or trainer; in new education system, basic feature is individual himself, who earns money via IKT. Educated man is no longer the one who knows everything, one time model of education cultural model, but man who can find what he does not know, and he needs IKT for that. Educated man is the one who learns all of his life how to learn, so that education is becoming more and more shaping of the environment in which all people individually as well as together find contents that can satisfy our development needs. Education is getting dynamic: it stops being life preparation, but it rather becomes a vital part of it.
IKT, changes in demographic characteristics of population (*significant increase of older population*), changes within professional development, and other changes in life, keep imposing a need for education to be connected with independent learning and self-education.
From methodological point of view, there is no final knowledge system, nor is it possible to methodically formulate it, and that is why students and pupils must be provided with methods that enable continuous learning throughout life, continuous actualization of their initial knowledge. As many authors observe, '*learning for life once and for all'*, on which traditional education with determined '*set of school years'* was based, gives place to permanent education as a lifetime process.
Education will have to change in direction of developing abilities of learning instead of piling up information that will be available through new media anyway. Memory will not have the same value as it had for centuries because memory goes beyond limits of value, it is turning into technically impartial matter, measured by megabytes in software terms of speaking.
Microelectronic revolution will bring to abolishing of classical school-oriented society, namely it will contribute to establishment of '*education society'* where differences between formal and informal education will be erased namely the transfer from collective education to individual one will be enabled. Simultaneously, cultural turnover will take place: school's goal will not be to collectively transfer knowledge and to pile up information, but rather to individually develop ability for learning, namely studying of methodology of studying and research. '*Set of school years'* will be replaced by constant (*permanent*) and individual education.
IKT ways of mass communication may contribute to, and indeed they contribute to transformation of classical education system into flexible process of permanent education. With IKT revolution, a new relation between science, education and work is established, and a/m relation requires both permanent education during working life time and complementary education and work. Development of new technologies requires innovation of knowledge that is needed for functions in work process, and permanent education requires also changes in education technology, especially when it comes to self-education that is synchronized with knowledge acquiring in school system or outside of the school system.
Although the biggest objection to the knowledge acquired through IKT is that it is mixed and that it lacks systematic approach, stability and homogeneity, that kind of learning appeals to young people. The reasons are the following:
- condensed way of conveying,
- visualization of information,
- dynamic forms,
- divergent – nonlinear knowledge sequences,
- active and interactive communication with information, and
- Decreased fear of pedagogic sanctions typical for traditional school.

Young people simply like IKT that satisfy their curiosity fast, that inform about various issues, reduce emotional tension, provide possibility to exchange ideas (Chat) programs, testing or solidifying attitudes, find out something through fun. Having in mind that IKT has become a powerful participant in education process and that it makes so-called triangle of education influence along with school and family, with a student in its centre,

understanding of its influence is important.
Process of introducing modern IKT is inevitably followed by changes of existing structures, as well as creating of various alternative approaches to process of lifetime education and learning. There is a '*softening*' of limits between formal and informal education, process of passing on knowledge is more and more observed as set of individual activities oriented towards one individual involved in learning process. IKT has conditioned a need of reevaluation of the existing conceptions of literacy, traditional roles of pedagogic and androgenic stuff, education and learning activities, but it has brought to '*flood*' of information and deeper existing educational gap.
Models of modern education work change and it is necessary to recognize importance of the newest model *on line* or virtual education of adults that use the latest IKT achievements as a footing. *On-line* model is created on the basis of so far models of adults' education with the use of modern media IKT developed in the last decade of the 21st century – Internet. It kept basic characteristics of correspondence model, it exists on all education levels, in wide range of education areas, and it is achieved through delivery of the material of lecture, semi-propaganda and programmed type, by using consultative and consultative-instructive work.
New virtual colleges and universities base their work on multiple digital platforms, including video-conferences, collaborative on-line laboratories, and libraries of texts in e-form. However, this model has some disadvantages: insufficient numbers of schools have required IKT equipment; there is no adequate training of teachers for new technology implementation, etc.
Critics of this model assert that modern computer technology separates students from reading books in libraries, from their teachers, as well as students from each other. Followers of IKT implementation in education area observe activation and improvement of students. IKT enables '*reviving*' numerous teaching situations. Research of virtual encyclopedias, galleries, dictionaries is faster, easier and cheaper than usual ways of work. IKT, unlike existing teaching means, like TV, makes a student an active partaker in his/her own lessons.
Based on a/m theory, a goal of '*change management'* can be introduced in Serbia, for it is education of wider population about IKT, namely providing citizens with basic and key skills of IKT. Having in mind that wide use of IKT and appearance of public electronic services change many areas of life, these skills will become necessary for performance of everyday activities. Only those citizens that know how to use IKT will be members of information culture. Fulfilling of this requirement is significant for restraining from digital division in society. Information society requires respective social '*changes*', trained and skillful manpower that is skilled for working in conditions of high competitive global economy. This manpower can be made only with respective IKT education.

3. CONCLUSION

Education system *'must change'*, to be adjusted, to provide sufficient IKT education on all levels promoting creative thinking and introduction of *'permanent learning'* – learning throughout all life. As wide use of IKT has become crucial in many professions, knowledge about the proficient way of IKT should be integral part of education programs. The following is needed: involving wide population of citizens, introduction of concept of after education and learning all lifetime, adjusting education program and teaching process to the needs of information society, qualifying teaching staff for modern types of teaching, solidifying IKT capacities for modern education and science research, supporting creative research and development, and education and culture supported by new IKT technology.
'*Changes*' in improvement of education system present complex process that needs to be devised with awareness. This area refers to activities with the objective to prepare whole population for 'knowledge society' through education for basic IKT literacy and raising general awareness about the significance of information society. Younger generations should be involved in this action by regular education procedure. Minimum degree of IKT literacy must be provided in preschool institutions, primary and secondary schools, as well as faculties. Older generations should be involved in this education process through various specially devised courses, and this especially refers to '*older*' teaching staff.

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INTELLECTUAL PROPERTY RIGHTS IN INNOVATIONS MANAGEMENT AT CLOTHING INDUSTRY

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Summary: *In today's contemporary clothing industry, innovation represents a key word of different aspects of management. Meaning that continuous innovating is the only way to subsist in turbulent conditions ruling the market. Thus, innovation represents increasingly significant scientific area. The task of innovation management is based on a concept of managing the flow of knowledge in the frame of and between basic functions of a company, as well as in communicating with the surroundings. The successfulness of innovation management is reflected through the total business success of a company. The purpose of this work presents a conjunction between the intellectual property rights and innovation management at clothing industry. In fact, different aspects of intellectual capital- inventions, trade marks, industrial design, new information technologies, have been protected in various ways.*

Key words: *intellectual property, invention, innovation, management, trade mark*

1. INTRODUCTION

Innovation management in clothing industry implies planning, organizing, coordination and control of innovation processes and innovation- starting from the idea to its realisation. The key activities present defining the innovation strategy and complying it with other strategies, i.e. business, technological, marketing strategy and intellectual property strategy, generating ideas and creating the knowledge directed at new and perfected products, processes, services, technologies, organization, marketing etc., development of ideas through work prototypes, transferring them into production, distribution and usage, development of a system of encouraging the innovations and establishing the innovation performances.
Before the innovation is offered and started applying in one's own production, it is necessary to perform legal protection of the innovation. When discussing a trade mark protection, it is defined in the classification by class 25 for clothing.

2. INNOVATION MANAGEMENT

In broader sense, an innovation represents a new way of approach or solving problems and tasks of the most various areas of human activities (art, science, management, law, etc.). In narrow sense, an innovation is considered to be a new way of solving problems or tasks of techniques, production, organization, marketing, etc. The „novelty" of a solution is generally relative, i.e. it can include application of a third party experience, thus of known, familiar solutions that have not yet been applied at a concrete area. A special type of innovations are inventions, characterised by absolute novelty, i.e. those are new solutions application of which has not yet been officially registered anywhere in the world.
The term innovation originates from a Latin word 'innovare', which in the translation means to make something new. Accordingly, the assumption that an innovation is a process of transforming possibilities into new ideas and placing them into wide practical application.

An industrial innovation comprises technical design, production, management and commercial activities, included at marketing of a new (or advanced) product, or the first commercial application of a new (or advanced) process or equipment. [2]
An innovation does not necessarily have to imply the commercialization of only major advancements at the state level of technology (radical innovation), it also includes an application of minor changes in technological know-how (advancement or incremental innovation). [3]
An innovation is a specific tool of en entrepreneur, a mean of the one to use a change as a possibility for a different work or providing a different service. An innovation can be presented as a discipline, it can be studied and applied in practice. [4]
Companies acquire competitive advantage through the innovations. They also proceed in a broader sense, by including new technologies and new ways of production and performance. [5]
The ability to innovate presents a feature of a company dealing with adopting new ideas and prompt reaction to the impulses from the surroundings. In that sense, such a company can be marked as innovative.
In order that an innovative process becomes successful, it is necessary that it is managed in all of its stages, starting from the idea to its commercialization.
An innovation is considered implemented if it has been introduced and placed into the market (a product innovation), or if it has been used in a production process (a process innovation). The innovations thus include series of scientific, technological, organizational, financial and commercial activities.
Innovation management, i.e. managing of innovations, represents a basis of total company development, in the sense of long term profitability and competitiveness. The successfulness of innovation management can be of crucial significance for the position and existence of a company on the market.
One of the basic relation of the management is the one linking invention, innovation, performances and business success (not any invention is leading to a successful innovation, nor does any innovation imply business success).

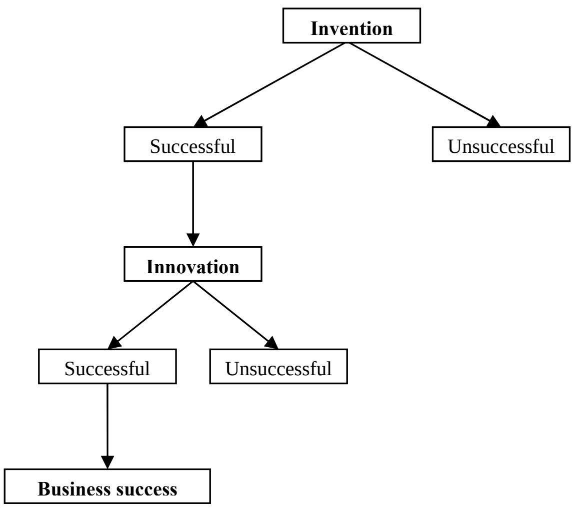

Figure 1.: A route from invention to business success

The key functions of innovation management include:
- Research and Development
- Production
- Marketing

The task of innovation management is based on a concept of managing the knowledge flow in the frame of and between these (and other) functions in a company, as well as in communicating with the surroundings. The successfulness of innovation management is reflected through the total business success of a company.

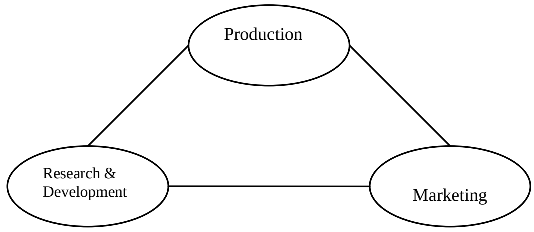

Figure 2.: Key functions of innovation management

3. CONCEPTUAL DETERMINATION OF INTELLECTUAL PROPERTY

Intellectual property is a product of mind and in a way it is owned by an individual or an organization, which can afterwards make a decision to freely share it with others or to control its application.
Intellectual property is present almost everywhere around us: in creative works, such as books, films, records or softwares and also in everyday objects, such as clothing, cars, computers, medicines and types of herbs. All of the mentioned have been created owing to the accomplishments in science and technology. All of the specific features assisting us in choosing a product that we are to buy, such as trade mark and design belong to the domain of intellectual property. The major part of what we see on the Internet, whether it is a webpage or the name of a domain, also presents some form of intellectual property.
Intellectual property presents a legal concept respective to the components of intellectual capital protected by law. [1]
The intellectual capital implies 'wealth of knowledge', advantages in knowledge possessed by a company.

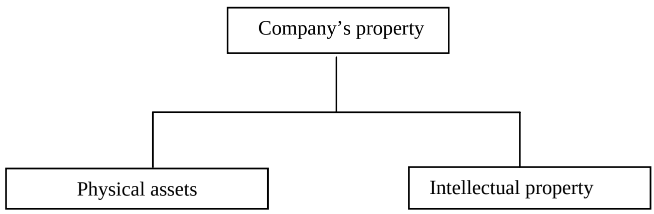

Figure 3.: Components of a company's property

Taking into account that a technology comprises a tacit knowledge, i.e. the knowledge not being burdened as a physical asset, in numerous high technology companies, the intellectual capital can be economically more significant than physical assets. Since the two types of property are considerably different by the characteristics, a question arises on evaluation of intellectual capital of a company relative to the physical-materialised property. An increasingly appearing problem is rating and evaluating the shares of numerous companies. The intellectual capital is specified by the term „good-will" and in many industrial branches it is becoming an increasingly important item possessed by a company.
An intellectual property is usually comprised of:
- Business reputation
- Operative value of a company
- List of buyers
- Patents, hallmarks, design, business secret and licences

Looking from the aspects of innovation management, it can be said that the intellectual capital of a company is an extremely significant factor of ability of innovation, thus representing a foundation of competitive advantage and profitability.

4. TRADE MARK PROTECTION AND CREATING A BRAND

Trade mark, namely mark in jargon, is any symbol used for marking the goods at the market. If a businessman wishes to enable any third party in using the same or similar mark for marking his goods, he must protect the

mark by a hallmark. The hallmark is a legal term for mark, namely for mark protected by norms of legal hallmarks as the products of industrial ownership. These marks, namely trademarks, can be trademarks of goods if they are related to marking the goods and serviceable if related to providing services.
For example, we make the difference of the trousers marked by trademark MEDAKI from the trousers with trademark WINNER. Both marks have been protected by the hallmark several years ago, at national and international level and are owned by our clothing producers. Both trademarks are used for differentiating the goods of their owners from the same or similar articles of other clothing producers on the market. Their owners have a legal right to forbid any other participants of the market to use the same or similar mark for the same or similar articles, and those using such a mark without the owner's authorisation are obliged to pay the indemnity or to stop further usage of such a mark.
There are different types of protecting a trade mark with a hallmark:
- National protection of a trade mark by a hallmark, applicable for the territory of Serbia and
- International protection, including those countries for which a protection is applied for and granted (WIPO).

A businessman that submitted an application for protecting the trade mark by a hallmark and has received a Decision on approving the hallmark is called: the hallmark holder, titular or the owner of the hallmark. However, since the procedure for national approval of the hallmark lasts too long (from 2 to 3 years because of the compiled work of the Institute for intellectual properties) and the applicant for approval of the hallmark has the same rights as the titular of the hallmark (he is called the titular of rights from the application). [10]
The titular of the hallmark and the titular of the rights from the application, according to the Law have the following exclusive rights:
- Right to mark the articles by the hallmark;
- Right to place into market such marked articles (to sell the articles),
- Right to put the mark protected by the hallmark onto the business cards, memorandums, invoices, internet addresses, advertisements and any other business correspondence.

The persons also have an exclusive authorisation to:
- Prohibit any third party to use the same mark for marking the same or similar articles,
- Prohibit any third party to use similar mark for marking the same or similar articles.

For example, the hallmark MEDAKI titular for clothing can prohibit any other participant in the market to use the same mark MEDAKI or a similar mark MEDAK, MADAKI etc. While placing the goods, for marking the clothing, but it cannot prohibit the application of that mark for marking, for example, cars, chemical products, etc.
This originates from the principle of specialty, stating that the hallmark is valid only for the goods for which the protection is asked for, namely, for an appropriate class or classes of the goods, according to Nice Classification (including 45 classes).
An exception to this rule is the institute of 'a famous hallmark". If a hallmark is well-known, its titular can prohibit any person to use the same or similar mark for marking its goods, regardless of the type of the goods. For example, it is considered that LEVIS is a famous hallmark, thus no products can be marked by this hallmark, even those that have no connection with the clothing.
In business practice, a hallmark is considered to be famous if minimum 80 % of the citizens in one country associate that hallmark with a specific entrepreneur, i.e. with its article.
The legislator has also protected the so called institute of "generally known" or „notorious mark". It is about a mark that is not protected by a hallmark, but it is generally known by the consumers that a certain individual is marking its goods by that mark. In this way those participants at the market are discouraged if they wish to usurp the trade mark owned by another party which has not been protected by hallmark but after long period of usage it has become famous as the trade mark of a specific producer.
The brand of a product is an essential aspect of the product strategy regarding the function of marketing. It is used for, as we have stated earlier, differentiating one product from other, similar products at the market but it is also used as the information about origin and source of a concrete product.
According to F. Kotler, brand of a product is the name, term, mark, symbol and their combination, with purpose of identifying the goods and services of one producer or a group of producers and differentiate them from the competitors' goods.
From marketing point of view, using the brand of the product has specific advantages. By using the brand, the process of ordering and delivery of goods is made easier. The name of a brand and the trade mark provide legal protection against eventual copying and reproducing by the competitors. The brand of a product is used in segmentation of target buyers, in determining the quality level and other features of the product. The brand of a product contributes the building-up of an image of the product itself and the image of the corporation.
From the aspect of buyers, the brand of a product simplifies the identification of potential suppliers and of the products, the identification of the product's quality and other means relevant for the product. According to the brand of a product, the consumers identify the difference between products among the competitors regarding the quality, expiration date, functionality, provision of post-selling services, etc.

In order to develop a successful brand, it is important to perform certain analyses from the marketing point of view:

- It is necessary to know what are the characteristics of a strong brand, how to create it and how to strengthen it?
- The ways of increasing the value of the brand should be established and also how the increase of the value of the brand contributes to better financial results?
- Should more brands be used for similar products?
- Should a certain number of products be included into a group of "family mark" (family brand) or should brands be developed for a certain complex of production program and assortment, or should special brands be used for each of the products?
- When and under what conditions should the brand be abandoned?

A brand creates values for a company in four ways. Firstly, a strong brand occupies the attention and confidence of the buyers, distributers and public in general. Secondly, a strong brand enables the high market-share. Thirdly, the buyers are loyal to the strong brand, it enables greater stability and minimum of risk. Fourthly, a successful brand enables high rating of a product and constant spreading of the market.

It is important that a company's management is aware when the mark should be revitalized and repositioned. From the point of view of introducing innovations, repositioning of the brand is performed by modernizing of the production, introducing new technologies, new design, advancement of quality and other measures of the marketing area.

Modern economy and business operations inflict a constant need to ascertain the following aspects of the relations at the market. First of all:

- Actual or potential requirement of customers
- Advantage over competitors at the market
- Quality standard
- Investor's expectation.

However, any innovation brings with itself certain problems, starting from necessary material assets and time to realize an idea, from research to the application of knowledge, through all the difficulties occurring unexpectedly and which are based on inexperience, i.e. on non-ascertaining of all possible aspects of an innovation and the problems that could possibly arise.

The development of innovations requires:

- Investment of material assets
- Time consumption
- Research, application of knowledge and experience.

The innovation development is justifiable if it contributes even a minimum of benefit for which it has been predicted and which is expected from the specific innovation. The process of introducing an innovation is very complex, starting from 'giving birth' to an idea all the way to the realisation. Besides the fact that the idea should be placed on the market before the competitors, the potential dangers and misusages that could occur should be taken into account. In order to prevent it, one should devise defense mechanisms in advance.

Companies have for long been using the intellectual property as the basis for production and sale of goods and services. However, it is increasingly admitted that the intellectual property in itself is a precious value that can accomplish income through licencing, that can improve a company's balance, increase the share value and accomplish leverage. During development of evaluation techniques, it would be favourable to provide a certain level of international consistency in this area.

8. CONCLUSION

Under conditions ruling the market today, each of the participants should know the structure of intellectual property ownership and should consider the protection of its own intellectual accomplishments. Naturally, the other's intellectual property should be respected and used only as an additional source of information, such is the case, for example, with a patent information.

An economic position today depends more on the technological changes than on the capital investment.

Technical- technological information are a major development resource, and most of the information is consisted exclusively in patent documents, i.e. in information from the area of industrial property.

In today's economy, there is the tendency of increasing the investments into intangible assets.

When a company has got resources for spending, it is more often directed at research and development rather than at new factories and equipment. However, intellectual property, by the nature of itself, is less tangible than material assets and for that reason it is more subject to theft.

Protection of intellectual property contributes the economic growth in developed as well as in countries under development by prompting innovations, cultural diversity and technical development as a part of broader political frame. If used in an appropriate way, the rights to intellectual property can also present vital means of annulling poverty by trading.

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THEORETICAL-METHODOLOGICAL ASPECTS OF TECHNOLOGICAL DEVELOPMENT STUDYING

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Summary: *Technological development represents one of the most important factors of modern society. In order to achieve the development objectives of modern society, an appropriate level of development of the research- development base is necessary. Numerous researches undoubtedly show that technological development is one of the most significant factors of modern development. New technologies initiate changes in all social areas, taking the control over technological growth, attempting to limit or even just alleviate the negative effects of technological growth expansion on nature environment and its resources. Under conditions of dynamic scientific- technological progress, high demands are set especially on quality of human resource as main source of wealth of a society. As a necessary condition for development of modern global economy presence and activity of increasing number of highly educated employees and workers in any branch of activity is imposed. Thus, management functions are manifested as changes towards greater participation of activities of creative and innovative characters.*

Key words: *development, research, new technologies, innovation*

1. INTRODUCTION

The permanent and unstoppable growth of international trade, an increase of direct investments, decrease of administrative and political barriers for movement of goods and services, is opening a space for market competition that we can define as a level at which a nation can, under conditions of free and fair market, produce goods and provide services that pass the test of international market, simultaneously maintaining or increasing the actual gain of its citizens. When global economy is concerned, to be competitive at global market can only be achieved by extremely successful business activities, by application of current technological levels. A productivity and the growth rate are an efficient measure of technologically not-falling beyond at global level and thus, the governments of most of the countries stimulate in numerous ways those branches of economy that have relevant presuppositions that they are able to achieve a high productivity and competitive advantage at global market.

In the concrete case, in conditions of actions of third technological revolution with all the problems and consequences it brings itself, a question is imposed how those problems can be overcome using the existing theories and forms of organization of economy and society in the world and whether the problems of society development that are a consequence of the third technological revolution require radical revision of the theory and policy, reassessment of the existing and finding out new economy development strategies and along with it of the society.

Technological development presents one of the main drivers of globalization. It is not hard to perceive that the world is moving towards competition in global technologies. New technologies being numerous mainly in highly developed countries become very promptly applicable.

During the world economic crises in the seventies, a standpoint was widely present that it can be solved by new developing strategic policies on the basis of the existing peculiarities of certain countries and based on their level of development and peculiarities of the political system. Based on numerous studies and reviews of all of the aspects of the economic crises, it came to knowledge that the third technological revolution has showed the necessity for a new economic theory and with it an appropriate policy of economic development as a whole. Such standpoint has been equally related to insufficiently developed countries, regardless of their social system, since each country face great changes caused by the third technological revolution accepted with different social and material performances. “All of it generates an extremely complex total world ambient, where each country by itself should form its own development strategy and the knowledge are already sufficient and it is clear enough to what extent and in what way they are transferable from one type of country to another” [8]. Third scientific- technological revolution thus represents a new era, the era in which a level of education and inclusion of science is built in fundaments of a company and society, resisting to solely depend on technological modernization. Under conditions of current dynamic scientific- technological progress, high demands are set especially on quality of human resource as main source of wealth of a society. As a necessary condition for development of modern global economy presence and activity of increasing number of highly educated employees and workers in any branch of activity is imposed. Thus, management functions are manifested as changes towards greater participation of activities of creative and innovative characters.

The efficiency has been replaced by creativity, gravity is moved towards creativity and innovation; a constant increase of knowledge fund as an existential need for successful management activity performance so that they would be qualified to manage their own future.

From point of view of knowledge studies, “individuals are submitted to a law of increasing specialization meaning that their compaction is also complicated. Inexorable science progress and acquiring increasing knowledge in all the more narrow areas has contributed to a more efficient concern for parts; and along with it, neglecting and even rejection of concern about the totality. An attempt of replacing wisdom by exactness, reduction of science to technique contributes to limitations of modern age.

An educated person of a modern society is aware of the fact that the more he is learning about world the more his knowledge on the problems that have not been solved, his Socratic knowledge about ignorance, becomes more detailed and precise" [5].

The effect of technological development in developed countries is motivated by further perfecting of technology for the purpose of seizure of the economic effects as well as removal of the ambiguities caused under a certain social conditions. Countries being under development tend to have an insight into the effects of modern technological development so that they would more equally be involved in international apportionment of work.

Contribution of technological development to economic growth rate is significantly greater than from a cumulative contribution of all other production factors because the increase of work productivity is based largely on technique, technology and education and thus, the growth of production is attributed to the results of investing into scientific researches.

R. Solow (1957.) has noted, based on the study of developments of work productivity in non-agricultural sector of SAD in the period from 1909 to 1949 that the technical progress has contributed to increase of work productivity of about 88%. W. Hogan has, making corrections of some of Solow’s mistakes, determined that that contribution was even 91%!

The present emphasized significance of technical development in modern conditions demands a more precise, more determined definition of terms “technical progress”, “technological development”, “technological changes” and “scientific-technological changes” for the purpose of clearer viewing of action and effect of this phenomena. In domestic and foreign literature we paralelly come to a great number of terms that are most frequently used, such as: “technical progress”, " technological progress", " technical-technological progress", "scientific and technical-technological progress” and also “technological development”.

A certain number of authors put an equality sign between the mentioned terms considering that, in essence, they are identical terms; while opposite them some authors tend to draw a harsh boundary between the mention terms [15]. The presence of different interpretation of technical from technological progress is caused by different defining of the terms “techniques” and “technology”.

The term “technique” implies primarily a set of instruments of labour in the broadest sense and due to such comprehension the term “technical progress” should imply finding the new and perfecting the existing instruments of labour. The term technology originates, as many other terms, from Greek; it can be defined as a set of theoretical and practical knowledge people use with application of power and skills to develop intermediates and processed products as well as finished products and services. "Technological progress" represents a constituent part of production process where raw materials turn into finished products by using a certain mechanical-technical procedures and chemical- technological procedures [4].

In engineering disciplines, the term of technology is closely connected with instruments (machines, equipment, tools) used in processes. A technology in our practice appears in different and numerous methods, processes, techniques, under which influence comes to a transformation and/or trans-positioning (positioning) of raw materials with the purpose of adding value to input and creating an output satisfying or serving some of people’s needs. In voluminous expert literature there are present more similar views and definitions of the terms “technique” and “technology”, namely “technical progress” and “technological progress”.

Galbraith [1] implies under the term technology “a systematic application of organized knowledge for practical activities”, Baranson implies under the term “a production technique, system management and organization of production process”". In work “New industrial society”, Galbraith notes his considerations on great companies

with an observation that the prevalence of the great companies is a consequence of complicated nature of modern technology [7].
"Technology includes the set of those knowledge and skills related to: physical, chemical and other processes of processing or finishing raw materials and intermediates, based on which the technology is applied in production. A certain technology supposes also disposing of an appropriate, according to the nature of the process, specialized equipment, energy sources and materials. Vice-versa, certain equipment and other following conditions dictate an application of the appropriate technology" [14].
From numerous definitions used, a difference of comprehending of the term "technology" is noted. Narrower comprehensiveness of the term technology gives advantage to its technical aspects, while the broader ones put an equality sign between technology and the overall technological knowledge. Considering freedom and the right of approach of a researcher, it cannot be said that different approaches confirm the dynamic category of technology of modern, globally directed development of a society as a whole. However, predominant are those standpoints that the term technology includes production procedure, production management and perfecting of the existing production levels, even the methods of commercialization of products, education process and special training of employees.
Most of the researchers are of an opinion that technique and technology are not the same categories; that they differ but are functionally mutually connected and conditioned. That is why it can be said that the advancement in the area of technique is closely related to advancement in technology so that technical progress in a broader sense, when also implying technological progress, can be equalized with technical-technological progress.

2. TECHNOLOGICAL DEVELOPMENT TERM AND PARTICULARITIES

Evolution of comprehending the term technology was earlier solely viewed through processes in material production. The term technology today has a much broader meaning owing to its presence and action in all forms of activities of a man and thus also of society as a whole, including both material and area outside of material production.
The word technology itself originates from two words: "*tehne*", signifying skills, ability or knowledge for something to be done or for some work to be performed and "logos" - science. Since technology includes science, skills and ability of a man for satisfying his needs, the originality of the term of this word is unquestionable.
Technology includes science, skills and ability of a man to produce for the purpose of satisfying both material and immaterial needs. Material needs are defined as natural-physiological needs for health, moving, expressing, protection from natural disasters, unlike immaterial comprising the needs for creativity, identity, autonomy, commonness, participation, education, self-fulfillment, finding life's purpose, etc.
The comprehension of the term technology has evolved form an earlier exclusive observation through the processes of material production to today's broader sense, owing mostly to:

1. the presence and acting of technology in all forms of human activity, both in material production and beyond it, and
2. the evident and significant influences of technology in all areas of human activity.

3. PRIMARY ROLE OF A HUMAN

The significance and role of a human is undoubted, by influencing nature and society develops a technology compatible to his needs and also to needs and objectives of complete society. Thus, a man confirms his primary place and role in application of technology for the purpose of constant technological progress of society
The contents (a) and (b) in figure 1 of connection between technology, nature, society and human are given in graphs, and the difference is only in the fact who is the bearer of the central role in that enclosed chain.
Viewing technology, man and society, we actually consider the relation of technological and social progress through the following three cycles:

1. The cycle of income increase causing the technological achievements growth as well as perfecting the overall process, resulting in higher productivity by conditioning certainty of income increase.
2. The increased income gives grounds to new technological innovation in the form of new and in advancing of the existing products, with the income increase.
3. A high income increase enables growth of living standard, and along with it, it contributes to a greater savings on an inhabitant, which is an indicator of a greater investment potential of a society.

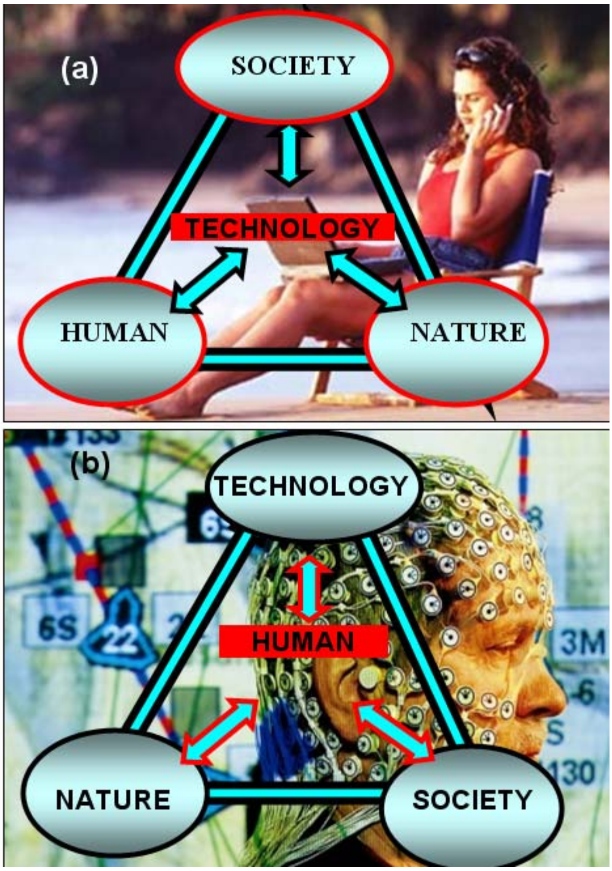

Figure 1: Connection between technology, nature, society and human (a) and (b)
(Source: www.fon.bg-ac/tehnologija/)

Through historical development of technology the relation of technology and nature is perceived, starting from human's fighting for survival in natural environment. The first and very significant function of the relation of technology and nature is the endeavor of a human to adapt nature as much as possible to his own needs, which in turn has certain influence on the environment.
The obvious negative effects of human's adaptation of nature to his needs, demand a serious and responsible approach in solving of the arisen consequences and certainty of significantly greater attention to exploitation of natural resources by finding the new and alternative resources, ecological protection, constant renewal of nature and protection of nature.

4. TECHNOLOGICAL GROWTH DYNAMICS

The existing differences in interpretation of the term technology arise from the present level of generalization and abstraction and thus, this term is interpreted from an aspect of two phenomena: macro and micro phenomenon.
Technologies differ also on the basis of the type of the resources they use:

1. IT (information technology) – the resources are information;
2. Traditional production technologies – physical resources and physical equipment in production
3. Modern production technologies (hybrid technologies) that process physical resources under control of automated information systems including flexible production systems, robots and automation.

Technological growth dynamics for most of the eminent researches represents a decisive factor of modern economic and social development. Having primarily in mind its polyvalent influence as well as the inevitable

consequences it causes to technological development, it can be said that it classifies under "a group of phenomena that are studied from different aspects in modern world" [4].
An introductory citation of Daniell Bell coming from 1973 concurs with contemporary developing determination of economic growth placing on first place category- *knowledge*. Bell sees a specialty of a new technological sphere in systematic development of research (*research and development*) and in generating new, scientifically based industries, such as: electronics, optics, polymers and similar. "Systematical developing researches" of Bell concur with opening of numerous technological parks, undoubtedly showing the necessity of development of new technologies in the centre of which is the theoretical knowledge; dominating the production sector thus providing further advancement of society.
Kan's "Vision of linear expansion" is based on conspicuous expansion of new technologies getting a broader application, noting that in the past much more time for implementation of new technology was necessary unlike the current dynamic development of society in which new technologies are directly included into production process, i.e. services.
Kan uses the term synergy[1]*("synergism"*) denoting the simultaneousness of promotion and advancement by application of new technologies not excluding accidental, unexpected benefits and innovations in some other area that the one for which the technological solution has been purposed [3].
The intensive technological growth of mankind is recorded during the period from 1820 to 1900; it is a period of "industrial growth", an age characterized by significant discoveries among which an important place is taken by a discovery of steam engine.
The historical period of growth is called industrial revolution transgressing into information revolution today; future "revolutions" probably belong to bio-technologies and bio-engineering.
Three key periods are most often noted within industrial revolution:
1. Period till the end of 19th century presents a period of energy engineering when human energy was replaced by machine work,
2. Period from the end of 19th century is a period of mechanization when using the electrical energy conditioned the mechanization, and
3. Period from 1950-ies, is noted as the age of automation based on development of information and microchip technology.

From the point of view of technological development and changes in area of organization and management, three historical periods are also stated:
1. Period prior-to-Taylor characterized by introduction of new work habits, new disciplines and new stimuli to economy activity,
2. Mass production period- Frederick V. Taylor and his followers (Henry Gantt, Frank and Lilian Gilbreth – Scientific Management School[2]), establish a new profession- industrial engineering; scientific methods of managing purposed for allocation of means for measuring, evaluating the work and advancement of control and coordination of production processes, and
3. Flexible production period- where the greatest significance in managing is given to technologies and realization of flexibility in production systems. The role of managers in technological innovations is greater.

Another classification is distinguished based on development of technological innovations and social changes:
1. Mass production period- in twenties of nineteenth century- the beginning of contemporary history of business life when the development of technological innovations happens simultaneously with social changes, conditioning the establishment of a business company. A special attention is given to development of mass production which progressively decreases the cost per product unit- "a standard product with the lowest price – wins".
2. Mass marketing period-in thirties of twentieth century- the beginning of moving the gravity from production to market orientation; product differentiation; competition development on the market, and the product innovation take the primacy over the process innovation, and
3. Period from 1950 signified as a post-industrial age- informatics age with appearance of the new technologies, competitors, products and integration of all parts and functions of a company for the purpose of acquiring better positioning of the company on the competitive market.

At the end of 20-ieth century, Toffler "has been the first one to use the term „Knowledge society"in order to describe a society that arisen: a new world based on knowledge. In the past twenty years the progress of technology and science has confirmed the truthfulness of his predictions. Technological, technical and scientific elite of cosmopolitan vision and of cosmopolitan composition has changed the world we live and the way of thinking" [17].

[1] synergy "common actions, cooperation, assistance, fusion of more organs (muscles) for performing some action or movement", *Vujaklija*.
[2] The school of scientific determination of the best method for any job as well as selection, training and motivating the workers and employees.

By the development and increasingly broader application of electronics the overall development of society is stimulated and negative consequences of outdated technologies are eliminated. The effect of development imposes at the post-civilization society the necessity of institutionalization of research and development, changes in the spheres of knowledge and technology and, indirectly, during the transition of economy from primary and secondary to tertian sector.
Modern economy, by expansion of technology and electronics- especially in the area of computers and communication, changes the industrial process that is no longer the basic determinant of structure change and values. Scientific and technical knowledge advances production process spreading in every aspect of social life.
"If we consider technology as a great motor, a powerful accelerator, then the knowledge can be considered as its fuel. We have come to a crossroads of the process of acceleration in society because the motor is supplied more and more, day after day, by the fuel" [12].
Bžezinski, following the ideas of Norbert Wiener, believes that the discovery of a compass, powder and printing in fifteenth century have been the initiating factors of future industrial revolution. Using an analogy, Bžezinski, as a modern functional equivalent of the compass sees space research, the powder equivalent would then be nuclear fission and an equivalent to printing would be television and other modern mass communication means. Based on it, Bžezinski concludes that the consequences of the new, technotronic revolution are reflected in all social areas: economy, politics and culture.
In a broader sense, the term technology implies the totality of ways and methods for obtaining, processing and finishing of raw materials, materials, intermediaries and products in different economy branches. Technology as a scientific discipline constantly analyses and perfects numerous methods and procedures. The processes of obtaining, processing, finishing, transport, warehousing and storing for realization of production projects are called technological processes. Also, a detailed description of production processes, based on obligatory international standardization is called technology.
The term technology is usually related either to some economy branch (mining technology, constructing technology, engineering technology) or to a way of obtaining- processing of certain materials; it is related to a specific economy branch or to a way of providing, namely processing of certain materials (technology of metal, technology of fibrous materials, textile technology).
In different branches of industry, production technology is constantly renewed and changed, causing the acceleration of technical progress
Development directions of modern technologies are the following: transgressing from discrete technological processes to the uninterrupted; introducing ecological technologies for the purpose of a more complete exploitation of raw materials, materials, energy and fuel reducing to a minimum or complete waste liquidation. Advancement of mining technology is gaining a special significance for the purpose of increasing efficacy of ore obtaining, their enrichment and processing, reprocessing environment, providing complexness of work usage in economy [2].
Technology as a science has a task of determining and selecting among those chemical, physical, mechanical and other lawfulness in the course of natural processes that can be realized with the aim of more efficient production processes, with time consumption decreased to minimum, of material resources, with increase of productivity and efficacy.
All of the existing technologies have a mutual feature reflected in the fact that all of the technologies are constantly renewing, resulting form new scientific discoveries.

5. CONTEMPORARY TECHNOLOGICAL SYSTEM

Contemporary technology- contemporary technological system- in its essence is a set of methods, technical means and systems that with an appropriate organization have the objective to provide products- goods and services (Figure 2).
Essentially, technology is a set of methods and technical means with the help of which, with appropriate organization, solving of certain problems is possible for the purpose of providing products- goods and services.
Depending on the purpose of researching the social phenomena, included in the definitions on technical-technological progress given by certain authors, there are numerous and different definitions present in literature. For the academic Strumillo-Petrashkevich, technological progress is "…a measured-by-law historical process of perfecting tools of labour and production methods, implying simultaneous saving of alive and materialized work".

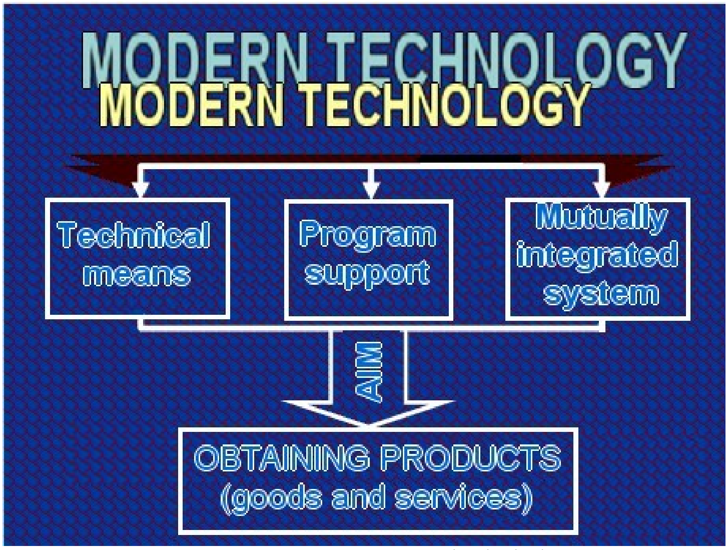

Figure 2: Contemporary technological system

The author of optimal strategy of economic growth, Prof. Radmila Stojanovic, in a broader sense defines technical progress under which " … we imply not only a new machine, new raw material or a new technical progress, but also various methods of better exploitation of so far known elements of production and known technological processes, namely the structural change in the overall material production that enable a growth of an average social productivity of work and a greater efficacy of exploitation of available resources" [10].
T. Vujkovic indicates that "a technical progress can be defined as an economic phenomenon expressing every change in production instruments, in technological processes and organizational forms of production and allocation, leading to an increase of production, increase of application of a product's value, to reduction of costs of social work per product unit and thus to advancement in knowledge of producers and conditions of their work" [16].
N. Čobeljić implies the following under technical progress:" … a constant process of perfecting means and objects of work and energy sources, introducing new production methods and ways of organization and management of production, the result of which is achieving an increase of social productivity of work."
Emphasizing that for S. Urošević technical progress and economic progress are not a one-dimensional process that can be explained by simple definitions, namely that it is:… a very complex process characterized by dynamic and essential changes in the basis of production, especially in the elements, functions and structure of work instruments as well as in the functions of a man in the production process" [13].
Defining technical progress is also bearing to an extent a seal of time when the definitions are stated, but even by the 'seal'- time- they are still actual. Certainly there are some differences between a technical progress from the earlier stages of development and of contemporary technical progress; but there are also present the contiguous points usually related to negative effects of technological progress on a man as an individual.
Direct connection of science with production demands formulating of logical and methodological suppositions of fundamental, innovative researches. The term of innovation has no precise definition due to similarity with the terms, such as invention, scientific discovery and scientific research. Fundamental researches include theoretical and experimental work; they represent conquering new knowledge and finding out the new fields of research with long-term objectives of application. Applied studies include creative work, solely based on the results of basic studies, with the purpose of solving certain practical (technological-technical) problems. Development researches are directed towards the objective of conquering the production of new or improving the existing materials, products and appliances, namely, introducing new of perfecting the existing procedures, system and services.
The essence of scientific-research work is actually a projection of creativity of a spirit of a man, organizing and performing the work; it is the most complicated modality of human work while research presents a complex intellectual process, with a purpose of determining of law and lawfulness ruling the nature, human society and thought [11].
There are several stages of scientific-research methodology of work. They are:
- The phase of research subject selection;

- The phase of defining problem and setting the hypothesis;
- The phase of collecting important data for research and processing;
- The phase of analyzing and showing the collected research data, and
- Presentation of the obtained research results.

5.1. The significance of invention and scientific-research work

The invention and scientific-research work have undoubtedly a primary significance for economy. Thus, knowledge as the result of scientific-research works in 90-ties participated in the overall income of Germany 45%, in USA with 60%, and in Japan with the total 75% [6].

The inventors and scientific researchers are present in all society layers, in all groups of profession, in all religions and all nations, as constant fighter of a special revolution, occurring uninterruptedly. The results of their constant work are spreaded and transgressed to all areas, to all the countries of the world, regardless of the system and social organization. They are the citizens of the world and their "revolution" is accepted by everyone, because it is always creative, with all the effects of social and economic welfare. Their ideas and creations in invention and science cannot be conditioned and limited by work place and time

In certain economic structures there is often present a negative relation towards the researchers, especially in the structure of social sector of their matrices, demoralizing the researchers to a certain extent and causing their disappointment at the society they live and work in. It is exactly because they are forced to present and validate the results of their work outside their matrices.

The results of scientific-research work at faculties, namely universities present a special problem occurring out of two reasons. The first one is if the university is not sufficiently related to the existing research institutes, first of all to domestic or foreign institutes having a high level of implementation of new scientific technologies and methods; in other case the problem is more pronounced if the universities with their faculties work independently on certain research projects, that are published in expert magazines after successful completion and thus become available to every researcher in the country and the world interested in it.

A great number of successfully completed projects at a university experience the same fate as the numerous registered patents- they have an insufficient percentage of exploitation. Regardless of the existing problems, the implementation of scientific methods, patents, technological innovations, the scientific activity at universities is developed simultaneously with development of education, thus presenting a source, first of all of appropriate scientists and also of certain new scientifically based projects of a certain economic activity. A country investing a significant part of the national income into the researches does so because it has recognized the significance of connection of science, technique and production which giving a new quality and generating a potential power has unforeseeable developing proportions. Connecting of science, technique and production has especially been emphasized after the Second World War, and the result of that connection presents a great number of realized discoveries and innovations.

An obvious and very important event following modern technological growth is the increasing concentration of highly specialized staff in the area of researching-development activity and allocating greater resources for development of the area. Comparing it with other activities, this area records a significantly faster growth of number of employed. According to the estimations of P. Auger (1966) the number of employed in this area is doubled at every ten years and we witness the increased number of scientific papers and magazines, namely the number of scientific informatics units.

There are two approaches in reviewing the management of technological development:

Global approach is hard to be achieved because a man is still unable to predict and influence the events caused by technological development. Besides that, mankind is, unfortunately, in a great measure inconsistent and factious about a very important ecological problems and the blame for it bear the most developed countries of the world. One of the evidence of the mentioned assertion is concluding of an ecological agreement form 1997, proposed in Kyoto about decreasing of gas emissions. The agreement remains unachievable "due to" USA's, the richest country of the world, fears that the additional ecological measures could endanger its economic growth.

Local approach of managing technological development is reflected in the fact that in a certain company it is possible to manage by using modern equipment and greater investments in the sector of research and development, by new production technologies or modernizing of the existing plants. Such approach can, at a certain degree, influence the developed countries so that they would have more understanding for the existing problems at global level.

6. CONCLUDING DISCUSSIONS

Modern economy by expansion of technology and electronics- especially in the area of computers and communications is changing the industrial process that is no longer a basic determinant of the change of structure and value. The scientific and technical knowledge advances the production process, spreading over all the aspects of social life.

Technological development dynamics, for most of the eminent researchers, presents a decisive factor of modern social and economical growth, having in mind, first of all, the polyvalent action as well as inevitable consequences caused by the technological development.

Modern technological development and significant material resources invested in it, expect the more pronounced actions on economical and social development. This enables the decrease of average time of application of a scientific discovery which has been, as a rule, very long.

With the development of new technologies and also of intensive consumption of natural resources human civilization realizes the vision of the constant economic growth and material rise. The obvious material rise as the century's paradigm stimulates the uncontrolled consumption of natural resources with unforeseeable consequences of destroying the environment. Global changes of climate, great damages of the ozone layer, destruction of a great number of herbal and animal kinds, discord between a continual increase of production and the increasingly smaller possibilities of processing and disposing of technological waste are only some of numerous cases of global destruction of natural equilibrium.

The world is faced with a great challenge, looking for a way to secure the so-far tendency of economic growth also protecting simultaneously the environment from pollution and exhaustion of natural resources. The solution has been looked for in new technologies directed not only to increase of productivity and efficacy but also to savings of natural resources, along with providing of efficient recycling of secondary raw materials, purification of waste waters and exhausting gases.

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APPLICATION OF PROMETHEE METHOD FOR RANKING LOCATIONS EXPOSED TO HEAVY METAL SOIL CONTAMINATION: CASE STUDY BOR, SERBIA

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Summary: *This study presents procedures applied in the identification and ranking of the locations exposed to heavy metal pollutants correlated to copper extraction in RTB Bor Smelter. The sampled locations were defined at a wider area around the smelter both in urban and rural zones up to 20 km in diameter from the smelter smokestack – the very source of pollution in this region. The application of multi-criteria analysis using PROMETHEE-GAIA models, enabled identification of critical heavy metal polluted zones which might affect the population's health due to the presence of these metals in Food Chain.*

Keywords: *Multi-criteria analysis, heavy metals, pollution, ecology management, PROMETHEE/GAIA*

1. INTRODUCTION

In the last few decades environmental problems have received increasing attention, especially for air and land quality problems in urban and rural areas in Europe. (Nikolaou, 2003; Gotschi, et al., 2005) The public, industry, and government generally acknowledge that protecting, improving, and managing environmental resources is extremely important. Researchers have responded by designing and implementing experiments, collecting and analyzing data, and developing and parameterizing models in order to better understand and provide predictions about the nature of environmental and ecological systems. As a result of these difficulties, there has been an increase in the development and use of formal scientific approaches to assist with environmental management and decision-making. (Ascough II et al., 2008)

Many authors have demonstrated the importance of integrated approache for this problem. They have highlighted the need for the incorporation of ecology problems in global management systems. (Jakeman and Letcher, 2003; Jakeman et al.,2006; Gunderson and Holling, 2000; Curtis et al., 2005) One of the important aspects in this field has multicriteria decision analysis that attempts to combine social, environmental and economic assessment criteria into a single performance measure, and gives the most optimal solution to managers faced with many management alternatives. (Local Agenda 21., 1992)

Multi-criteria analysis methods are used, among others, for solving environmental problems, for example:
1) the selection of the most appropriate technology for cleaning polluting soil (Hokkanen and Salminen, 1997a);
2) the assessment and selection of waste treatment/management technologies (Hokkanen and Salminen, 1997b);
3) the site allocation of waste management plants and landfill sites (Calijuri et al., 2004; Lahdelma et al., 2002) etc. In this paper, a special method of MCDM (Multi-criteria decision making)- PROMETHEE/GAIA was apllied to determine correlations between the heavy metal content and sites where samples were taken.

2. MATERIALS AND METHODS

2.1. Study area

Copper Mining and Smelting Complex, which has existed more than 100 years, is located at the junction of three borders – Serbia, Romania and Bulgaria; it's less than 100 km away from Romania (The Danube border crossing) and less than 30 km from Bulgaria with the Timok River passing nearby. In the south-easterly direction from Bor, there is Djerdap National Park, and in the west and north-westerly there are the Bor Lake and the Homolje mountain range noted for its intact nature and considered a great tourist potential of the region.

This smelter applies a dated copper production technology (standard pyrometallurgy, smelting in blast furnaces and utilization of SO_2 in production of of H_2SO_4, having a relatively low level of utilization <50%) which results in polluting the area with high concentrations of SO_2, airborne particles of PM_{10} and aero sediments of PM > PM_{10}. The situation is mainly a result of new technology not introduced in timely manner. (Živković, et.al., 2007)

The air pollution monitoring system, installed in 2003, enables permanent monitoring of the amount of SO_2 in gasses and cumulative measurement of heavy metal concentrations in airborne particles at two check points in urban areas of Bor. There is also a mobile monitoring station enabling measurement at other locations. The results obtained are mostly forwarded to local authorities and the company management and rarely publicized. (Dimitijević et.al., 2008) The problem of pollution caused by various polluters as the direct consequence of the company's activities, hasn't been taken into much consideration by the management of RTB BOR, and poses a moral dilemma – whether to produce at any cost. (Halis, et.al., 2007)

This study summarizes the results obtained by examination of heavy metal content in the soil surrounding the copper smelter in Bor (Serbia), after a hundred year's production in the smelter which is among those of highest capacities in Europe. The analysed samples had been taken from both urban (40 000 residents) and rural (20 000 residents) parts of the area in the diameter of 20 km from the smelter (air polluter). We would like to stress the fact (published by RTB Bor) that, as a result of company's activities, 200 000 tones of SO_2 is discharged yearly, i.e. 3,5 tones per each resident. During the processing of a tone of raw material, 2,25 kg of dust is emitted which means 5,3 -19,6 kg of As per person, 4,86 – 7,99 kg Zn and 6,27 - 25,11 kg Pb each year – much more than in other industrial areas in Europe. (LEAP, 2003) These figures show that we've been dealing with the most polluted region in Europe, which endangers not only local population but majority of south-eastern Europe as well. Regardless of the size of the region, the attitude of the company's management must be based on global approach towards solving the issue. (Parnel, 2006; Yorgun, 2007)

The objective of the study is to point out potential hazards caused by high concentrations of heavy metals in the soil surrounding Copper Smelter Bor, with increasing tendency due to the existing outdated technology. Furthermore, this Site is determined as one of the most polluted in Europe, and consequently, the Site which highly endangers population's health. The impact of high metals present in the food chain hadn't been particularly examined, though the increased concentration of As is noted in some plants so as in organisms of RTB employees and Bor residents. (LEAP, 2003)

Also, the aim of the work is to involve potential stakeholders in the activities undertaken to stop further pollution by the smelter so as to put to an end the permanent degradation of soil in the area of The Danube basin since over 200 000 people live there.

2.2. Sample collection

The samples were taken from the sites (Fig. 1) in July/August 2008. The land at these sites hadn't been cultivated so the possibility of pesticides contamination could be excluded. The sampling was performed by coring drill, 5 cm in diameter, 30 cm deep. A five centimeter surface layer was removed, and the rest of the sample was homogenized and subjected to pH and heavy metal analyses.

2.3. Data analysis

A multi-criteria decision making method was employed to rank the examined urban and rural zones of Bor municipality concerning pollution level. (Rousis et al., 2008) Many authors analyze pollution issues using MCDM model. (Lim et al., 2005; Lim et al., 2006; Al-Rashdan et al., 1999; Khalil et al., 2004) PROMETHEE model was used here to rank sampled locations according to the concentrations of heavy metals in the soil, whereas GAIA model provided a graphic representation of PROMETHEE method, i.e. contributing as a decision-aiding model while using PROMETHEE ranking. (Visual Decision Inc., 2007) The PROMETHEE-GAIA model in processing the obtained data was used because of its advantages, compared to other MCDM models, such as structuring the issue, the amount of data that could be processed, possibility to quantify the qualitative values, software support and presentation of the results. (Macharis et.al, 2004; Visual Decision Inc.,2004)

PROMETHEE (Preference Ranking Organisation Method for Enrichment Evaluation) is a non-parametric outranking method for a finite set of alternatives. (Vego et.al, 2008; Brans et.al, 1984) These options include the choice of an appropriate preference function and the weighting given to each variable. The preference function defines how one object is to be ranked relative to another and translates the deviation between the evaluations of two samples on a single parameter into a preference degree. The preference degree represents an increasing function of the deviation; hence smaller deviations will contribute to weaker degrees of preference and larger ones to stronger degrees of preference. Six preference functions represented by specific shapes are available in the PROMETHEE method. (Table 1.) Each shape is dependent on two thresholds, Q and P. Q is an indifference threshold representing the largest deviation that is considered negligible and the preference threshold P represents the smallest deviation that is considered as decisive. P cannot be smaller than Q. The Gaussian threshold S is a middle value that is only used with the Gaussian preference function. (Brans, 1982; Brans et.al, 1984; Brans and Vincke, 1985; Hergen et.all,2006)

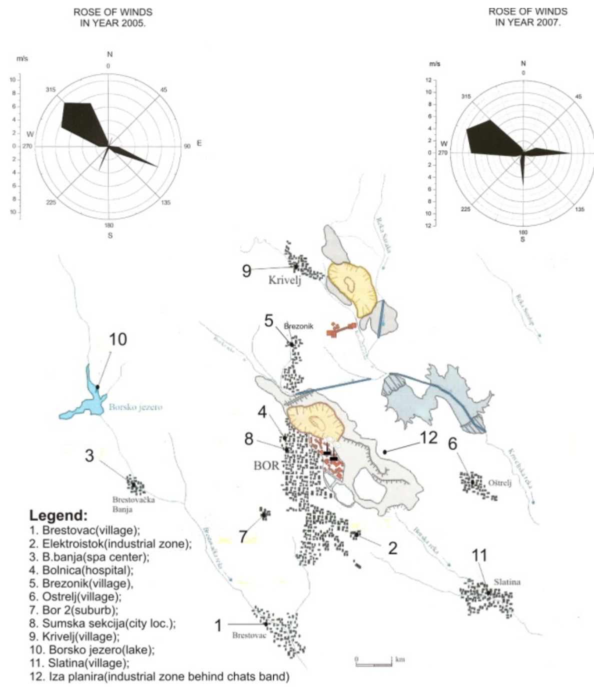


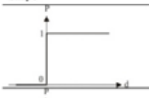
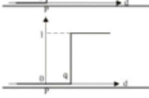
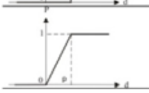
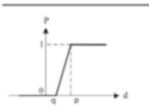
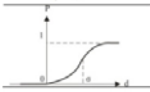
Fig. 1. Map of sites where samples were taken

PROMETHEE method is based on calculation of positive flow (Φ^+) and negative flow (Φ^-) for each alternative according to the given weight for each criteria. The positive outranking flow expresses how much each alternative is outranking all the others. The higher positive flow ($\Phi^+ \rightarrow 1$), the better the alternative. The negative outranking flow expresses how much each alternative is outranked by all the others. The smaller negative flow ($\Phi^- \rightarrow 0$), the better the alternative. The PROMETHEE II complete ranking is based on a calculation of net outranking flow value (ϕ), that represents the balance between the positive and negative outranking flows. The higher the net flow, the better the alternative. (Brans and Mareschal, 1994; Albadvi et.al, 2007; Anand and Kodali, 2008) The stepwise procedure for achieving this outranking method is presented below:

Step 1. Establishing an impact matrix/double entry table. Impact matrix for the selected criteria (j=1…n) and alternatives (i=1…m) can be established by using cardinal (quantitative) and ordinal (qualitative) data.

Step 2. Application of the preference function P(a,b). For each criterion, the selected preference function P(a,b) is applied to decide how much the outcome a is preferred to b. (Table 1)

Table 1: List of preference functions

Shape	Mathematical justification	threshold
	Type I: Usual criterion $P(d)=\begin{cases}0, d\le 0\\ 1, d>0\end{cases}$	-
	Type II: Quasi-criterion (U-shape) $P(d)=\begin{cases}0, d\le q\\ 1, d>q\end{cases}$	Q
	Type III: Criterion with linear preference (V-shape) $P(d)=\begin{cases}0, d<0\\ d/p, 0\le d\le p\\ 1, d>p\end{cases}$	P
	Type IV: Level criterion $P(d)=\begin{cases}0, d\le 0\\ 1/2, q<d<p\\ 1, d\ge p\end{cases}$	Q,P
	Type V: Criterion with linear preference and indifference area $P(d)=\begin{cases}0, d\le q\\ \frac{d-q}{p-q}, q<d\le p\\ 1, d>p\end{cases}$	Q,P
	Type VI: Gaussian criterion $P(d)=1-e^{-\frac{d^2}{2\sigma^2}}$	σ

Step 3. Calculation of an overall or global preference index Π(a,b) that represents the intensity of preference of a over b.

$$\pi(a,b)=\sum_{j=1}^{n} w_j \cdot P_j(a,b);\left(\sum_{j=1}^{n} w_j = 1\right) \quad . \tag{1}$$

Step 4. Calculation of outranking flows for each alternative $a \in A$:

- Positive preference flow (outranking):

$$\Phi^+(a)=\frac{1}{m-1}\sum_{x\in A}\pi(a,x)\ . \tag{2}$$

- Negative preference flow (being outranked):

$$\Phi^-(a)=\frac{1}{m-1}\sum_{x\in A}\pi(x,a)\ . \tag{3}$$

PROMETHEE I provides a partial ranking of the alternatives, but more realistic information about incomparability, while PROMETHEE II provides complete ranking of the alternatives by calculating the net flow:

$$\Phi(a)=\Phi^+(a)-\Phi^-(a)\ . \tag{4}$$

Part of information about mutually incomparable alternatives is lost in the case of PROMETHEE II.

Step 5. Comparison of outranking flows (PROMETHEE I):

$$\begin{cases} aP^{I}b \quad \text{if} \quad \begin{cases}\Phi^+(a)>\Phi^+(b) & \text{and} & \Phi^-(a)<\Phi^-(b)\\ \Phi^+(a)>\Phi^+(b) & \text{and} & \Phi^-(a)=\Phi^-(b)\\ \Phi^+(a)=\Phi^+(b) & \text{and} & \Phi^-(a)<\Phi^-(b)\end{cases}\\ aI^{I}b \quad \text{if} \quad \Phi^+(a)=\Phi^+(b) \quad \text{and} \quad \Phi^-(a)=\Phi^-(b)\\ aRb \quad \text{otherwise}\end{cases} \tag{5}$$

(P,I,R representing preference, indifference, incomparability- respectively).

Both partial ranking (PROMETHEE I) and complete ranking (PROMETHEE II) of the set of considered alternatives can be proposed to the stakeholders in order to solve the decision-making problem. (Brans and Vincke, 1985)

3. RESULTS AND DISCUSSION

Heavy metals found at the sites originate from airborne pollutants and aero sediments discharged by Copper Smelter Bor. Heavy metal values found in the soil do not originate from primary mineralization of regional copper deposits since mineralization of heavy metals can be traced at depths below 100 m at which RTB Company exploits its deposits. Evidently, the contaminants found in the soil, and probably affecting plants' nutrition, are of anthropogenic origin correlated to airborne PM_{10} and aero sediments discharged from the smelter located nearby.

The obtained results of determining the contents of heavy metals: Cu, Pb, Cd, Ni, Mn, As and Hg in the soil of the examined urban area of the town Bor and its surroundings reaching up to 20 km from the factory smokestacks are shown in the table 2 and they present 12 locations whose positions are shown in the Figure 1. In the table 2 are also found the facts on the chosen preference functions and indifference as well as the preference thresholds, necessary for the multi-criteria ranking of area according to the level of pollution caused by heavy metals – the facts obtained by means of PROMETHEE/GAIA method. The model represents the ranking of the best alternatives – the locations with the smallest amounts of heavy metals according to the given set of preference functions and criteria weights.

The results, showing the contents of heavy metals in the samples taken from the urban areas of the town and its surrounding, reveal high values. The fact that the some of the largest amounts of these metals have been found in the samples taken from the yard of the town hospital is itself a dire warning to the authorities of Bor, the company RTB Bor as well as the Serbian government: Cu- 0.254%; Pb- 0.018%; Cd-0.0006%; Ni-0.0049%; Mn-0.12%; As-.026% and Hg-0.3 g/t.

The Rose of Winds, Figure1 (an example for the year 2007) indicates that the W-NW course of the wind (i.e. west - north-west) is the most prominent one (approximately 30%) which results in the highest level of pollution in this area of the town (the measuring spots 4 and 8 – the town hospital and location "Sumska sekcija", respectively). As far as the presented the Rose of Winds for 2007 is in accordance with the level of the soil pollution, it is rather obvious that the Rose of Wind has been present (with smaller changes) over a longer period of time. With the growing distance from the factory smokestacks the soil pollution diminishes, and at the greatest distance of about 20 km (the measuring location 10 –Bor Lake) the pollution is the smallest, but nevertheless, the influence of pollution is still evident.

Table 2: Evaluation table. Heavy metals concentration in soil, in urban area of the town Bor and its surroundings, with given preference function and criteria weights

Criteria	Criteria- metal concentrations in sediments							
Alternatives	pH	Cu	Pb	Cd	Ni	Mn	As	Hg
Minimum/Maximum		Min	Min	Min	Min	Min	Min	Min
Preference Function		Linear	Linear	Linear	Linear	Linear	Linear	Linear
Indifference threshold(Q)		0.0116	0.0010	0.0000	0.0002	0.0042	0.0012	0.0101
Preference threshold(P)		0.0696	0.0057	0.0001	0.0012	0.0252	0.0073	0.0603
Unit		%	%	%	%	%	%	g/t
Location 1	7.7	0.053	0.007	0.0002	0.0045	0.11	0.0017	<0.1
Location 2	7.6	0.105	0.01	0.0004	0.0033	0.088	0.0068	0.1
Location 3	7.5	0.055	0.006	0.0002	0.0033	0.13	0.0052	0.1
Location 4	7.4	0.254	0.018	0.0006	0.0049	0.12	0.026	0.3
Location 5	7.9	0.077	0.008	0.0002	0.0012	0.12	0.0033	0.1
Location 6	7.8	0.039	0.004	0.0002	0.0041	0.12	0.0015	<0.1
Location 7	6	0.1	0.004	<0.0002	0.0037	0.12	0.0023	<0.1
Location 8	7.2	0.214	0.023	0.0005	0.0053	0.11	0.014	0.3
Location 9	6	0.058	0.006	0.0002	0.0016	0.12	0.0025	0.1
Location 10	7.5	0.022	0.005	0.0003	0.0037	0.046	0.0019	<0.1
Location 11	7.7	0.093	0.008	0.0003	0.0049	0.09	0.0041	0.1
Location 12	7.7	0.026	0.005	<0.0002	0.0037	0.11	0.0016	0.1
Analytic method	pH-meter	AAS	AAS	AAS	AAS	AAS	ICP-AES	A-Hg
Max.value		0.254	0.023	0.0006	0.0053	0.13	0.026	0.3
Average value		0.091333	0.008667	0.000292	0.003683	0.107000	0.005908	0.133075
Min.value		0.022	0.004	< 0.0002	0.0012	0.046	0.0015	<0.1

Comparing this values with other similar regions with industrial zone surroundings: Sofia- Bulgaria (Schulin et al., 2007; Doichinova et al., 2006); Palermo -Italy (Daniela Salvagio Manta et al.,2002); Manresa -Spain (Bech et al., 2008); Port Kembria -Australia (Matrely et al., 2004), it is cleary that soil contaminations at sample locations around the Smelting Complex in Bor-Serbia are very high. In that way, the production based on present tehnology will give furter cumulative increasment of heavy metal soil contaminations that represent a serious threat for human healt in this part of Europe.
In order to rank sites on the basis of their heave metal contaminations, PROMETHEE/GAIA methods were used. The *linear preference function* (Type V)(Fig. 2a), was selected as the best preference descriptor for quantitive data in Table 1. The chosen thresholds values for defined preference function are: Q=5% and P=30% (Fig. 2b), corresponding to the data values in table 2.

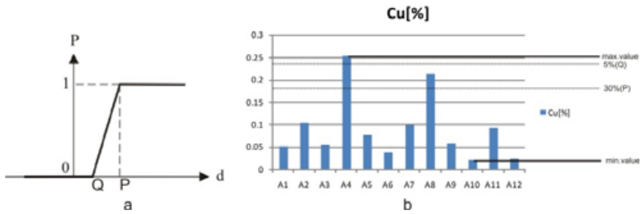


Fig. 2. Determing indifference and preference threshold for linear preference function (Example for criteria Cu %)

Science the selected criteria (concentration of heavy metals) do not have the same influence on human health and environment, the weight evaluation for each criteria also influences the results. (Table 3)

Table 3: Given weights for each criteria

Criteria- dangerous metal	Wight	Influence on health
Pb-lead	22.5	I category, stays in human organism and Cancerous
Cd-cadmium	22.5	I category, stays in human organism and Cancerous
As- arsenic	15	I category, easy removing from organism in period 3-5 years
Hg-mercury	10	Poisonous, not Cancerous, removing from organism in one month
Ni-nickel	15	Cancerous
Mn-manganese	10	has influence on nerve system
Cu-cuprum	5	harmful, but removable
Σ= 100		

Application of PROMETHEE method, with aid of software Decision Lab 2000, for the reference scenario has evaluated the following results for positive preference flow (Φ^+), negative preference flow (Φ^-) and net flow (Φ), shown in Table 4.

Table 4: Preference flows for case scenario

Locations	ϕ^+	ϕ^-	ϕ
Location 1	0.2575	0.1338	0.1237
Location 2	0.2794	0.4138	-0.1344
Location 3	0.2910	0.1295	0.1615
Location 4	0.0225	0.8536	-0.8310
Location 5	0.3445	0.1025	0.2421
Location 6	0.3222	0.0862	0.2360
Location 7	0.3203	0.0889	0.2314
Location 8	0.0516	0.8402	-0.7886
Location 9	0.3692	0.0510	0.3183
Location 10	0.3813	0.1475	0.2338
Location 11	0.2382	0.3131	-0.0749
Location 12	0.3387	0.0565	0.2822

PROMETHEE rank the sites from the best to the worst in terms of heavy metals pollution. As seen in Figure 3, the most polluted sites are location 4 and 8 (Loc.4 and Loc. 8). In this part of the town are also: the old center of the town, hotel, street market, local authorities, faculty, nursery school, one of the elementary schools, cultural center and town hospital. That indicates that this area needs immediate ecology reaction of all responsible institutions and individual.

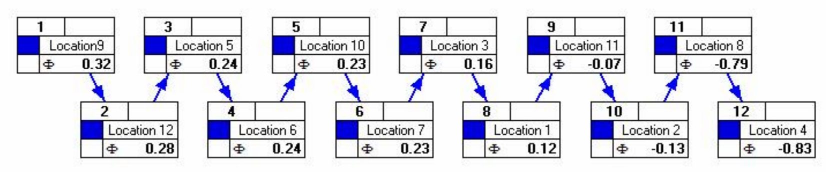


Fig. 3: PROMETHEE II complete ranking of the sites

One of advantages of using PROMETHEE/GAIA method in this work was usage of GAIA plane options (Geometrical Analysis for Interactive Assistance). Since the value Δ is lager than 75% (in this case 85.15%) the reliability of the GAIA plane can be considered as high.

According to the position of the criteria in the GAIA plane (squares), Figure 4, it is possible to determine the agreement or disagreement among certain criteria; thus, a group that is in agreement is the one consisting of Hg, Pb, As and Cu, the second one consists of Ni and Cd, whereas Mn is not in agreement with any of the proposed criteria. The positions of the alternatives (triangles) determine the strength or weakness of the criteria as well. The closer to the basis of the individual criteria, the better the alternative itself is. Within the cluster A the location Hospital (Loc. 4) and the location "Sumska sekcija" (Loc. 8) are placed, having the highest percentage of heavy metals in their soil which is obviously not good according to the criteria and which is directed towards the course opposite to the post of the decision stick pi, which defines a compromise solution in accordance with the given criteria weight. On the other hand, the group B (cluster B) is good (or bettter) according to a number of criteria – the location 12 is conspicuous, being the closest to the decision stick, as well as the location Krivelj (Loc.9) which is the best due to its contents of Ni and Cd. These results have also been obtained through the PROMETHEE ranking.

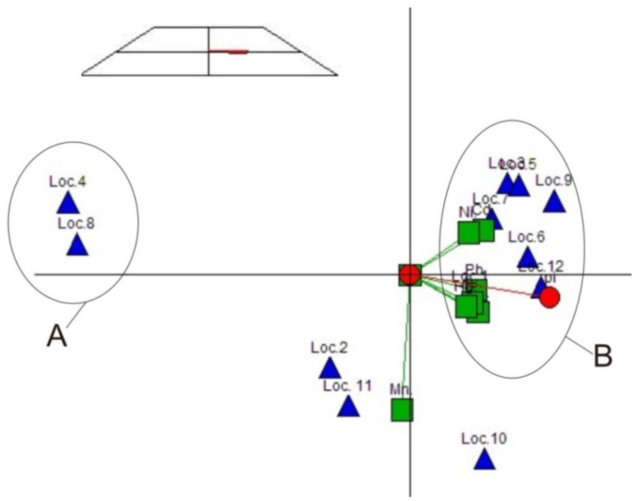


Fig. 4: GAIA plane analysis for defined model of heavy metal soil contamination

4. CONCLUSIONS

The obtained heavy metal contents of the soil down to 30 cm deep do not have their origins in mining mineralization in the region since the contents of these metals can be found only much deeper in the ground. The contents are rather the consequence of the lasting accumulation of airborne particles and aero-sediments made in the process of the oxidation during the melting of copper concentrate which contains heavy metals.

The obtained heavy metals` concentrations on some of the locations at the distance of 20 km from the factory smokestacks (especially in the urban area of the town where more than 40.000 people live) are up to ten times greater compared to other European industrial towns. (Daniela Salvogio Manta et al., 2002; Doichinova et al., 2006; Schulin, et al., 2007; Bech, et al., 2008) Further working of the Smelting Complex in Bor under the same conditions is going to increase the contents of heavy metals in soil since they are accumulated from the air.

It is confirmed by the ranking method PROMETHEE/ GAIA that the area with the most severe pollution is the area of the location 4 and 8 in downtown. Since these two locations are the places where the most important functions of the town are situated, the pollution seriously affects the health of the people.

The determined contents of heavy metals in soil in the examined area of Bor (Cu, Pb, Ni; Mn; As and Hg) points to a considerable level of its degradation and potential dangers of these metals entering the food chain of both human beings and animals, which would have serious consequences. Some of the consequences are already evident. (LEAP, 2003)These facts show that it is of great importance to urgently start dismissing the sources of emission of heavy metals and sulphur dioxide in PM_{10} as well as the sediments from the air. This could be achieved by means of modernization and reconstruction of the copper smelting factory in Bor. It is also important to start mending the soil that has been already degradated.

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BUSINESS PROCESSES REENGINEERING AND PROBLEMS IN IMPLEMENTATION

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Summary: *The reasons that determine the need for reengineering are the rapid changes (power of changes), more demanding customers (customer power) and greater competition (power of competition). Organizational structure that appears in itself is a process and team. In it are formed functional teams (using the same people on several projects), the organizational structures are flexible and innovative. Each company that wants to respond to the challenge, must be changed, restructuring, reorganize and redesign. This paper emphasizes that the business reengineering is an important concept directed toward satisfying the demands of consumers and / or user, and is based on disabilities that prevent the project reengineering to be successful. Defines the types of problems and investigate them to sources of appearance*

Keywords: *reengineering, implementation, business process, interference*

1. INTRODUCTION

In any business, customer is the center around which everything revolves. So, orientation according to the customer and / or the user becomes the main goal, because each performance (product and / or services) is a subject to international competition. For example, for sale over the Internet, it is important the availability to buyers, while it is not important where the sale is located.
Reengineering of business processes (Business Process Reengineering - hereinafter BPR), in order to achieve the planned organizational changes, adopt a combination of new views of the business processes aplicated toward advanced information technologies (hereinafter referred to as IT). Due to the possible significant impact on the important criteria such as speed of delivery, lower costs of production, quality, etc. according to customer's request., BPR is a sign and guide changes large and medium-sized companies in many industries (mostly in the manufacturing and service-real and the banking sector). As the ultimate goal is a possibility of achieving a permanent customer satisfaction, which would be a "cornerstone" in the further development of a company. "Business processes are the words that managers of companies give highest headache, because they are not process-oriented or procedure used to think. Business process is a set of activities that takes one or more inputs that create value for customers. Today, in small companies there is no one who is engaged in processes. Actually all are far from them. Question is, is there in the company's executive manager who has a job execution order for the customer? Is the company responsible for any development? All - marketing, production, finances are involved - but no one in charge. Traditional organizational scheme of the company (the scheme of organizational structure with internal functional connections) should be replaced with procedural schemes organization, that all business activities grouped in the main business processes and their support ″[1].
In this paper will be defined BPR interferences. They are, from the standpoint of the initiators and the project team, divided on the hard and soft interferences. So are some typical interference-barrier (resistance to change and / or technical difficulties) followed to the end user, including the domain of project management, direct of workers, organizations and environment

2. PROBLEMS IN IMPLEMENTATION OF BUSINESS PROCESSES

2.1. Possibilities of success in project implementation

The success of re-engineering of business processes it is possible to measure with the real objectives of the project reached. Companies that they had made business reengineering talking about the changes dramatically improve business processes.

One study in business reengineering 30 Bright companies that are extracted from the 500 largest Bright says about amazing results (Table 1). Business re-engineering had a great impact on the reduction of management costs (82%), production costs (57%) and distribution costs (39%) [2].

Table 1: Achievements of 30 businesses reengineering in Mexico [2]

Areas of achieved success	Improvements in %
Costs lowering	69
Optimization time	62
Better service productivity	59
Increase of productivity	59
Detailed information for decision-making	52
Improvement of quality	45
Better financial control	41
Greater profitability	38
Reduction of hierarchical levels	38
Modernization of technology	34
Personal motivation	34
Increase in sales	28
Market viability	28
Reduction of business loss	21
Contact with the environment	17
Increased presence in the market	14

2.2. Risk connections with business re-engineering

Easy strike expected business success reengineering is the possibility of the occurrence of various categories of risk. According to the reengineering success depends on the knowledge manager and knowledge of risk factors that affect the project reengineering business. In the following table 2 are the 5 categories of risk that are most frequent in the business reengineering [3].

2.3. Problems (interference) in the implementation of business reengineering

Disturbances are unexpected and unplanned problems in the business process reengineering. Noise increases the risk of the project. For example, increasing the resistance to the middle management by objectives of management teams that lead the project is a political risk. Noise slow down the implementation of which are necessary to support the project quickly came to the success or failure may be prevented. There are other problems with the less dramatic and significant impact. They can represent the difficulties that may one day overcome, and so become a hindrance. These problems may appear on the surface in many projects reengineering company. In them, and include diseases of the project, failure of computer equipment, etc.

Interference must be eliminated, because they require too much spending power of the project team and the people affected by. Energy that is used against interference is not expressed in the steps the project and therefore is unreturnable losses in output (products / services). For example, the endless meetings and frustration can negatively affect the positive outcome of reengineering. It is therefore recommended that the beginning of the project make prevention in preventing the development of possible interference. It is not recommended to do business reengineering of the high-level and spend a large part of energy. On the basis of impact on the success of the implementation of business reengineering, problems (interference) can be divided into: hard and soft interference. Figure 1 shows the hard and soft interference as well as areas that contain the main reasons for difficulties in the implementation [4].

Table 2: Categories of business reengineering risk [3].

Categories of risk	Definition
1. Financial risk	Project does not return as much invested means represent.
2. Technical risk	Business processes require information or technology that are not available or do not work.
3. Main project	Organization search for solutions outside their opportunities or project team is not compatible.
4. Functional risk	Organization search solutions outside their opportunities or organization are opposed to reorganization plan, which is not usable to that type of business that the company does.
5. Political risk	People resist change, the project or project gradually lost the confidence of upper management.

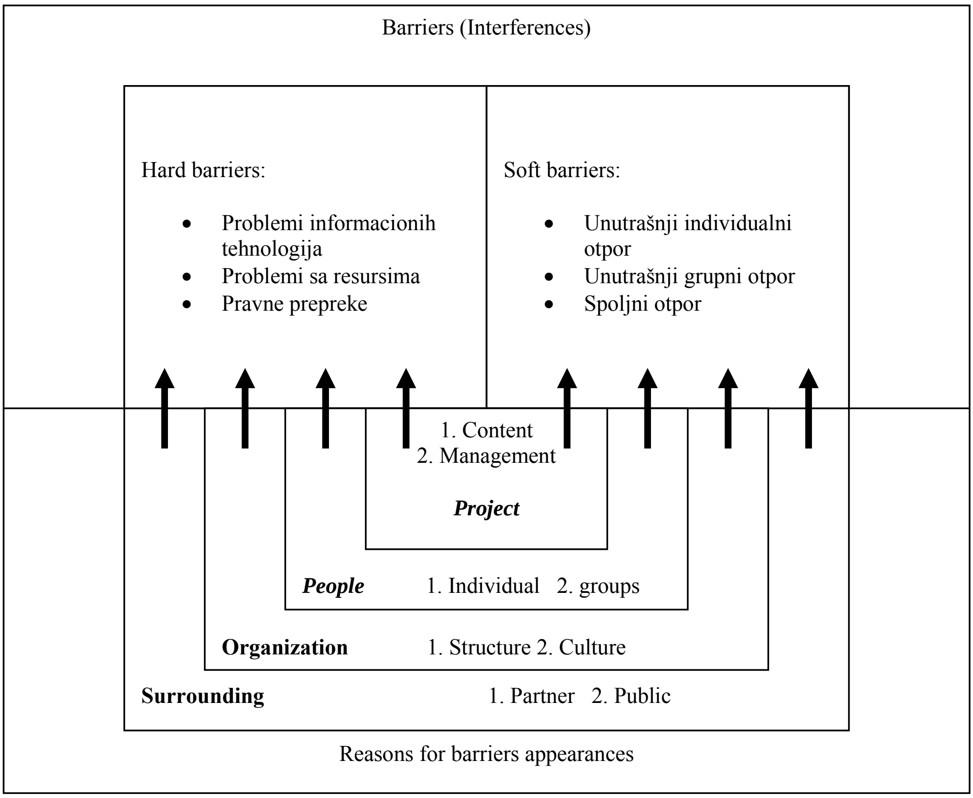

Figure 1: Types and causes interferences (barriers) in the implementation of business reengineering [4]

2.3.1. Hard interference in implementation

Hard interference include IT problems, problems with the resources and legal obstacles, soft interference problems include people. For example, IT (hardware and software), which is not able to provide support to

process the organization can be a nuisance. This obstacle is typical for organizations that want to maintain their high investment in hardware and software, hoping (the illusion) that inherited the existing system be able to serve well. Manufacturers and suppliers of IT are defeated by success rate of process orienting and almost direct their research and product development to solve procedural business.
Typical problem is the lack of resources sufficient space for the work of the team based on the rules. Team members, who are physically separated, should have easy access to equipment equipment, such as teleconferencing.
Legal difficulties can be transformed into a serious interference. In Germany, for example, Siemens, a different number of federal regulations and the entity prevented the development of business process reengineering project, because it failed to gather the necessary number originally planned for success in organizational attempts, because they are working regulations banned flexibility of working time [5]

2.3.2. Soft interference in the implementation

Soft interference in the implementation of business reengineering are problems of people, because they resist change. Soft interference in the internal implementation includes individual resistance, the resistance group and external resistance. Depending on the point of view, there are two possible views of resistance toward the change:

Type "A" resistance in the implementation of business reengineering
It is found that the resistances of this kind are understandable resistance to thinking and actions. Managers must be aware of the four most common reasons, the resistance of people to organizational changes. These include: a desire not to lose something which is valuable, misunderstanding about the changes, the belief that the change will not change the feeling in the organization and the low level of tolerance to change [6].

Type "B" resistance in the implementation of business reengineering
The analysis indicates that resistance to this kind of resistance to make the use of force. Sick people do not call themselves resistance and believe that their resistance in the main belongs to the type "B". Resistance is the indirect way subordinate to say "NO" to change.
Often the initiators of the project team members and consider resistance as a necessary evil: "No change without resistance,"and” innovation of a history of resistance" But experience says that people generally resist changes when they were not asked for their opinion. It is not said to them, how the changes in progress, and how changes will affect them personally. This type of resistance must often be the focus of management.
Inside individual resistance appears when people in the organization do not accept the content of the project and / or management. This can cover your obvious form. Standing is a phenomenon, rather than fundamental reasons are the basis resistance behavior, conflict management and individual resistance to destructive personality.
Internal resistance is a group behavior groups in the organization. These groups may be formally or informally organized. For example, a group electrician can provide resistance to the plan in which they are divided so that must cooperate with a group of mechanics. They believe that they have a higher status than the status of a mechanic and therefore complain i.e. provide resistance.
External resistance is the resistance that shows people outside the organization. For example, customers and suppliers can be a great resistance against plans (projects) that are mixed in their interests. Here is a typical resistance occurs when customers production company wants to introduce bank slots which directly affect the employees in cash, which can cause a great resistance from customers

2.3.3. Relations between hard and soft interference

It is not always possible to make the correct classification of disability, i.e. if you can obstacle belongs to hard or soft disabilities. The following example is a good indicator of these statements.
Application software can be ordered over the Internet orders for approximately two minutes. When the software package selected, waiting for two seconds to write a contract with a provider of software. Supplier explains the situation to two seconds, actually impossible to time, and if I would be technically possible, it would cost much more, a budget for this addition to the software is not possible. Therefore, customers do not want a software package to be implemented by using live.
Analyzing this issue shows that customers have greater flexibility before software. There was no limit regardless of the number of accounts for the acquisition. They have found that buying software can cause many restrictions on their free decision-making process. In reality, it is not the time to respond to a transaction that is unacceptable, but the outcry against the idea of introducing information technology. Definitely not a hard obstacle, but a soft obstacle. Obviously, there is no sense spend more money in the software. Instead, resistance was tackled.

It is also the opposite may be true the same way. In reality soft obstacle could be hard to disguise nuisance. The following example shows.
Project implementation plan of mounting team in the production equipment requires electricians and mechanics to work together. Sometimes you need to make the electricians mechanic works, and vice versa. Many perpetrators do not accept the fact that may be employed under the condition that must be more to learn. They oppose the implementation of working teams. Project Manager, in such situations, you need to plan for penalties against these phenomena of resistance. You need to monitor, prevent interference claim people to work: the mechanic can not turn in electricians just over night. They must be trained in the basics of business electrician. Soft obstacle is in reality is in fact hard obstacle

2.4. Areas that are experiencing difficulties in the implementation of business reengineering

Sve smetnje koje utiču na uspeh implementacije poslovnog reengineeringa predstavljaju rezultat pojave fundamentalnih razloga. Nekada ovi razlozi nisu vidljivi, što i jeste uzrok , zašto smetnje napreduju, sve do onog trenutka dok se čišćenjem ne uklone fundamentalni problemi i smetnje koji utiču negativno na imlementaciju. Stoga je neophodno analizirati oblasti i područija gde se mogu pojaviti smetnje koje utiču na uspeh implementacije.
Sledeće oblasti predstavljaju uvek sumnjivo mesto u kojem se mogu stvoriti smetnje:

2.4.1. Project reasons

Business reengineering project itself can cause interference that we should face with. The structure of the project and project management can be of such nature, to include both hard and soft interference.
The structure of the project consists of selected business goals and the meeting with the new information technologies. Project structures can lead to an appearance of resistance and appearance of hard interference. Typical example of interference claim would be functionally oriented selection of software packages to support new processes. The structure of the project is the inexhaustible source of many difficulties, especially when it is not properly defined and understandable.
Project Management can be a source of great difficulties, if the path of their work unclean if affects the other employees. If confusion appears, suspicion and fear sometimes begin to wider. Suspicion and fear lead to the fall of the project, because people who are afraid and always in some doubt, do not perform tasks in line with expectations. No to recognize or not to repudiate human problems in the organization can also lead to the failure of the project.
Number of external consultants is very important for business reengineering project. They often have different attitudes, values, and use different methods for the difference from a client system. These differences may contribute to the creation of great resistance, "He's not one of us." On the other hand, if the consultant tries to become more intimate i.e. to better understand the client's culture and be part of the system, it can cause resistance to culture, because it provides less innovative tension. This is also a situation in which you can find and internal consultants. However, there is no real answer to the question of what conduct should be according to the client for reengineering business processes. Each relationship is different in their own way and should be accepted and adopted with both sides (of the consultants and the management). It is never allowed to happen is that consultants are used for manipulative actions of the organization.

2.4.2. Human reasons

People under the influence of organizational changes represent the largest source of possible interference. This is unfortunately true, and applies to all the people who are at all levels of the organization. Executives and lower secondary levels may oppose the changes, which would violate their jobs, the workers as direct perpetrators may become unemployed (to replace them more efficient technical systems), etc. Human behavior is based on their personality and on the basis of norms of the group to which he belongs.
Some senior executives / owners have the belief that the worst resistance to provide workers, as the direct perpetrators, but this is not the most common case. Boards of Directors / managers often provide resistance changes with more intensity in relation to the workers, for reasons of risk, because their lives and the lives of their families possible job losses. Therefore, many executives for business reengineering behave autocratic would not suffered any personal difficulties caused by the changes. On the other hand workers, in most cases they want to say what is expected from them. They do not like word games, and not interfere in the policy as opposed to the manager who is involved in such actions, they want to say what is their work and to receive a fee.

2.4.3. Organization reasons

Organizational structure can cause such interference by non flexibility and its dramatic changes. In large bureaucratic organizations is often latent intention to change simply died (not degenerate) when there is a possibility of destroying the new structure. Built-culture in the organization is another source of possible barriers, where culture unconsciously done pressure, the thinking, decision-making and the determination of the necessary actions for people who are employed in the company. Culture can dictate the impossibility of running away from the past and also the inability to invest in the future. Number of attempts reengineering business grows, because of his strategic page changes very important to remove ineffective, bad processes that do not allow the reduction of costs and increase process efficiency.

2.4.4. External reasons – reasons of the environment

Environment organizations, which are business process reengineering can cause interference implementation, and through legal means of public resistance. Organizations or business partners, suppliers and customers, can provide conscious or unconscious resistance to the content and purpose of business reengineering. At the end of environment can be quickly changed, and so I have become superfluous for business reengineering project.

2.5. Examples of the basic reasons for the appearance of interference in the implementation

Figure 1 shows the relationship between the possible difficulties of implementation of business reengineering and area that are experiencing the reasons for the appearance of interference. The relationship between disability and the basic reason is not a relationship of "one-on-one", but more often a few basic reasons can produce a nuisance. Vice versa, one main reason can lead to some interference different nature. Use of IT may appear more reason for the appearance of interference in the implementation, which can be treated and the interference in the domain of individuals, groups, organizations and environment.

2.5.1. The reasons for the appearance of interference in the use of information technology

Information technology allows one to say the pulse business reengineering. The process of service is simply inconceivable without the world network (World Wide Web). On the other hand, IT has the opportunity to a lot of influence on the development of interference in the implementation of business reengineering. Interference in IT is in fact problem of infrastructure (hardware, software and networking) of those technologies. These are the most common problems that arise in the implementation phase of business reengineering. Table 3 shows the typical reasons for the appearance of interference in IT.

Table3: Typical reasons for the appearance of interference in information technology (IT)

Basic reasons	**Project**		**People**		**Organization**		Environment	
Bariers	Content	Management	Individuals	Groups	Structure	Culture	Partner	Public
Software is not process-oriented	1. Bad choice of process						2.Delivery problems	
Users do not accept the system	1. Wrong IT configuration 2. Insufficient tests		3. The level of skills and knowledge too low 4. Resistence			5.Micro-politics		6.Doubt
Decentralization is not attainable	1.Unclear project goals		2. Lack of discipline			3.Strong control culture		

Interference 1: The software solution is not process-oriented
The main reasons can be found in the content of the project, in project management and accountability of supplier:
Reason 1: Poor choice of
The choice of software for the process may contain errors or mistakes content project management. Errors content project, appear in the case of poor definition of the criteria on which the software should rely. Among the criteria that use software for the computer are usually working group and databases [7]. Typical error in the project management that made bad choice of process. Proper way to contain the requirements of their own

suppliers that need to react promptly. Instead of taking software, which received praise other companies, where the requirements and organization of the company in much different from their own.
Reason 2: The delivery
Depending on the demanded accuracy, software companies trying to develop different software which would meet the various demands of users. However, to satisfy more requirements and software companies require more time and money for the construction of unnecessary software, which companies may be a problem, because the time and money very important factor in today's world of rapid change.

Interference 2: Users do not accept the system
Basis of reasons can be found in the content of the project, in project management, the people in the organization and the public:
Reason 1: Invalid configuration information technology
Selected configuration information technology can be wrong. For example, too large keypad can prevent the same speed reading and typing, which is very important in some jobs. Talk through some terminals (intranet) may be too slow and difficult. Speed of hardware and speed work through a network is significant because if it is too slow can negatively affect the business performance, etc..
Reason 2: Not enough (tests)
New computer configuration must be individually tested in the whole. Tests of strength, performance and opportunities must be carefully planned. It is necessary to test the entire process, because it may later occur that are dissatisfied and to negatively affect their behavior.
Reason 3: The level of skills and knowledge is too low
The lack of computer knowledge and skills and knowledge of the use of computer applications may be important reasons for interference. In practice, older people are often afraid of the thought to hit the computer, and that does not mention the fear that show in situations where younger have greater knowledge and skills in the work. It is necessary to remove the fear of the necessary education, training and use of new computer systems.
Reason 4: Resistance
Resistance may occur in the case of lack of sufficient knowledge and skills. Some people believe that the introduction to the new technology is always accompanied by the appearance of a resistance. But this can not be true, because the new technology is always followed by innovative editing. Connor / Lake explain human resistance as the lack of understanding. Lack of understanding will get people to accept change, and lack of skills and resources to perform the changes on the way.
Reason 5: Micro politics
Micro politics is used to describe the dangerous game in the organization. To get acquainted with the new IT frequent internal force organizations [8]. This is true in practice for the organization that conducted business reengineering projects. Power is often afraid to not lose a job by the younger and different colleagues.
Reason 6: question
If the system accepted from the side, that is, the outside or the environment, with employees can be a certain doubt.

Interference 3: Decentralization is not attainable
Basic reasons can be found in the content of the project, the people and culture:
Reason 1: ambiguous project goals
Project managers did not properly explained, and they are convinced that they are further charged that day. that will take longer to work. Chief executives do not have the same intentions and thinking as lower executives, they are freer in decision-making, have greater opportunities for individual progress, and so on. However, when the lower executives know the real plan and realistic goals, then they are actively engaged in the execution of their part of the work.
Reason 2: Lack of discipline
In the past, is always lower managers and workers were told what their task. For example, maintenance of hygiene, care for employees, etc., did not have the possibility of making important decisions. The new concept of decentralization requires a higher openness of them, the greater risk, greater involvement, etc.. Those workers who are not adjusted to these innovations and changes are a lack of discipline which can be disastrous for the successful execution of the project.
Reason 3: Strong control culture
Business reengineering requires a new culture. Unlike powerful centralized bureaucracy, where the virtue effective decision-making and action, much more pleasant culture where it is the virtue in the decision-making depending on the situation and buyers desire. There is a great difference between these two cultures.

2.5.2. The reasons for the internal resistance of individual

Another area in which we will pay attention is in fact individual resistance (type "A"), which opposes the project content and project management. In addition to IT problems, these problems are most often mentioned by practitioners when they ask for the implementation of business reengineering. This is also an area in which most often make the wrong decision. Executives who were responsible for the efficient business reengineering tried to give reasonable explanation for the emergence of personal resistance, placing in the position of psychologists that people read the characters, which is on the one hand a rigidity or negativity, and on the other hand, injured people have behaved the same: "The manager will never be able to change." understandably, this is often causing misunderstandings and prejudices. Specified a large area for improvement changes the project team and the people who influence others in the organization. Table 4 shows the typical individual resistance, and their basic causes. Here we pay attention to their interdependence.
First, individual resistance can occur in two different forms that affect the success of business reengineering and to: constructive and destructive resistance. Constructive resistance is always a positive influence on the progress that is affecting the achievement of goal of the project. Destructive resistance serves to end the project. Both types of resistance can be opened or closed. Open resistances are those who can hear and see, while they are closed resistances that it is not possible to see outside. The biggest danger for the success of business is reengineering in a closed-destructive resistance, and particularly during the implementation.

Tabela 4: Typical reasons for the occurrence of individual resistance

Basic reasons	**Projekat**		**Ljudi**		**Organizacija**		**Okruženje**	
Barriers	Content	Management	Individual	Groups	Structure	Culture	Partner	Public
Users do not accept the system		1. Approach	2.Personality			3.Experience		
Users do not accept the system	1.Objectives	2. Lack of impulsive changes	3.Destructive character	4.Group pressure	5. The loss of power over the people			6. Loss of acceptance from the public.

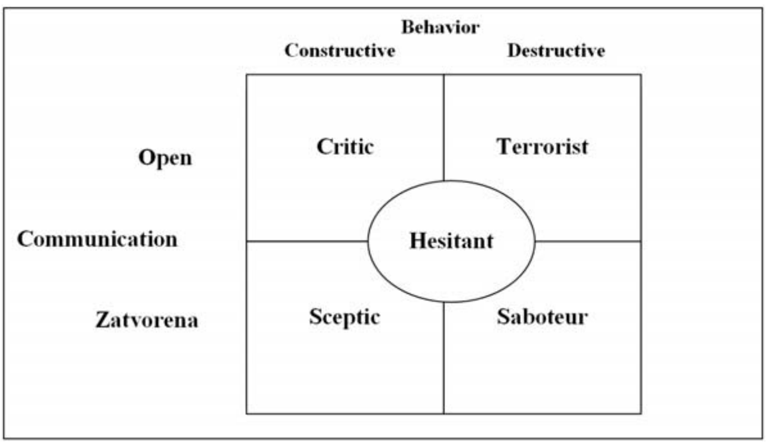

Figure 2: Five ways of resistant behavior

- Behavior of critics

Critic communicates openly and constructively shows behavior with regard to the project goals. This behavior is not facing in different directions with the project, but the behavior that adds new ideas project content. Critics are valuable traits for a successful outcome of the project. Important to the project initiators and the project team took into account the behavior of critics.

- Behavior of skeptics

Skeptics demonstrate similar behavior as well as critic. Skeptic says not all his opinion, but it is still skeptical about the different views of project content and project management. They speak only when asked for their opinion. He is a valuable source of ideas for the project origination.

- Behavior terrorists

Terrorist continuously gives attention and concern of each of the negative outcomes of the project. He acted openly to the project goals and the manner in which the project is done. Terrorists often announce their own procedures, which are negative by the project. Such conduct should be taken seriously, because the calculated probability says that the notice was possible (Watzlawik, 1976).

- Behavior saboteur

Saboteur demonstrates very negative behavior. Communication is open. The project team must be carefully considered to saboteur. Saboteur does not need to have the opportunity to destroy the business reengineering project. Only a few people into a saboteur.

- Behavior of hesitant

Hesitantly personality is not showing any signs that the closed or open, constructive or destructive. For that reason, this behavior is an even greater risk by the outcome of the project. When the project starts to be carried out on the right side, hesitant person becomes constructive.

Interference 1: Constructive resistance

Open and closed constructive cooperation can be explored all the way to project management, personality and organizational culture.

Main cause 1: Access project management

Constructive behavior of influential people is based on the way in which the project accomplished. If the project team search openness and behave in the way in which people can communicate without fear, then you can expect that people feel free to discuss the content of the project.

Main cause 2: Individuals people inspired by the project

Educated and non destructive persons, are mostly people who realization of themselves in helping the execution of projects. People that recognize their own characteristics. They are valuable members of the organization.

Main cause 3: Previous experience

Experiences with organizational projects are the basis of human behavior. If the experience is negative, then the behavior that affects the business reengineering bad. If the experience is positive, then the behavior of the project is also positive. Therefore, the behavior of people in the new organization can be found in the conflict with the behavior of the officers. Former success can lead to resistance in a way such that people believe that there is no need for changes.

Interference 2: Destructive behavior

Opened and closed destructive resistance may affect the domain content of the project, project management, person, group, and on the structure of the organization, which affect the culture, and the public.

Main cause 1: Project objectives

Approach that the project team uses, depends on the range of destructive behavior. If the project objectives do not take into account the human side, and the only pressure on the project considering technological goals, destructive behavior can develop as a consequence. Psychological negative people in the broader fight against the goals because they do not accept as their own goals. So it is necessary to balance personal goals with the goals of the project. This is particularly characteristic of the business reengineering that are facing the reduction of the organization.

Main cause 2: Change in time

Business reengineering is performed daily change in the way of the company. These changes force all influential people in the organization to change its own working style. Until discusses new style, managers must keep the pressure, to direct change in time (impulsively change). If this is not the case, there is a tendency of returning to the old style of work.

Main cause 3. Destructive personality

Board of Directors of business reengineering often explain to the destructive consequences of a destructive personality. More, the psychotherapist Erich Fromm pointed out that, in one hand destructive behavior growing phenomenon in today's world, but on the other hand, only a small number of people who have destructive personality. On charges for the appearance of a society that is largely responsible for the destructive behavior of people [9]. Destructive society can allow a person to work, but under certain conditions. Therefore, before someone is charged to the destructive personality, should be examined, if in your position in the organization supports the destructive behavior.

Main cause 4: Pressure group

Pressure groups can lead to destructive behavior. Group norms may force member to behave harmful (destructive), even if it is a just one, the members of the group will remain in compliance with group norms.

Main cause 5: The loss of power over people
People, who have lost power over the people, can respond to the destructive way. For example the loss of supervisory power, a person will react by carefully sabotage the team, and their final result. Sometimes people need to give a new role with new responsibilities, ie. the role of which will not be poistovećivan with the loss of power.
Main cause 6: Loss of Status
Often the loss of power over the people and represents a loss of status in the world outside the work place. This feeling of loss influence persons can affect their decisions and actions and to the poor, ie. destructive way.

3. CONCLUSION

BPR is a project that is in a large number of cases initiated by the top down and only its implementation is the reverse of the bottom up, the top hierarchy in the company. If successfully implemented reengineering company, which includes not only the process of transformation, but also the organizational structure, organizational design, organizational culture, employment, IT, to secure the road that leads successfully achieving performance. Time for change, there is a great influence on people and their jobs. Reengineering is always accompanied by significant resistance of the organization and outside influence. It is also the technical difficulties may further affect the failure of reengineering. In the worst case of problems that occur can cause failure at the end of the reengineering project. Some research, including research by Hoch, a point that evens the percentage of unsuccessful about 80%.
A small number of companies recognize the failure of its projects, fearing from the negative impact on their business after the announcements that their management made a mistake. In the organization, failure is rarely tolerate and people are prone to avoiding those who make mistakes. One case study, which was made by Cooper in 1995 in the UK, which included 120 companies that have tried to outline their business process reengineering, is interesting in that no company ha published that failed in reengineering. Our research shows that we need to explore and study how successful and unsuccessful projects, because of the mistakes to learn.

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MANAGEMENT OF TRANSPORTING MATERIAL PRODUCTS IN GOODS TRAFFIC

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Summary: *The globalization of economic flows, among others in the goods traffic, sets a very important and complex task, and that is that the products, whose place of production and consumption does not match, be faster and safer provided to the user. Terms and length of transport of the majority of material products is great, and often a decisive influence on the actual level of quality at the time of arrival to the end-user. However, storage conditions of products and the way of their storage and transport affect the preservation of the integrity of the product, ease of manipulation, rationality of use and storage capacity of the means of transportation, the organization of work, the cost of distribution, etc. The data show that more than 50% of losses caused by deterioration of products can be avoided by selecting the appropriate storage conditions, storing, transport and packaging. The aim of this paper is to offer a model of management of transport of material goods for all participants in the trade, which based on their activities have transport activity. The model is especially applicable to the business of small and medium businesses engaged in transport services.*

Keywords: *transport of material products, the decisions about the transportation costs, transport model.*

1. INTRODUCTION

Traffic and transportation are important components of transposition of material product. Traffic and transport activities include control over products movement and refers to the choice of way of transport (air, railway, river, pipe-line, road and intermodal), selection of specific roads (routes), respect for local, state and federal transportation regulations, and awareness of domestic and international requests for delivery of products. Transport is often the biggest cost in the process of transposition of material products. Because the transport is one of the most important components of transposition, it must managed with efficiency.Products must be stored in the factory or warehouse for later sale and consumption when the consumers require them, except if consumers immediately need them. Generally, the larger the discordance between production and consumption is, the bigger the amount of products we need to store. Storage and saving goods the management of necessary space for stocking in their activities. Special activities of storing include decisions on ownership, assessment of the necessary space and of the internal storage, reviewing the mix of products (which products should be stored), work related to preservation and maintenance, education of the staff and measuring of productivity.Material products are exposed to many influences on their way from producers to consumers, which often leads to deterioration of product quality. The journey from producers to consumers is often physically very long, and producers and consumers are in very remote locations from each other (often in two different continents), and the span between production and consumption can be a long. In that period, the products can be found in the warehouse (at the manufacturers, wholesale, retail, consumer) or a variety of transportation means. They are loaded, unloaded and moved from place to place.
During that, the products are exposed to different influences, and therefore they can be completely destroyed, and as a rule, it comes to falloff in their quality. In the course of movement of products from manufacturer to end-user there are a lot of critical places and moments. The biggest responsibility for the quality is with the manufacturer, and he is objectively the most interested that his product, at the precise moment when it comes to the end user, has a satisfactory quality. Some analysis shows that today more than 90% of all types of material goods that are in traffic, are subject to changes of quality after a longer or shorter exposure to normal atmospheric influences (temperature, air, sun, rain, etc.). The same analysis shows that 70% of losses incurred in this way can be avoided by creating the appropriate conditions in this part of the products' life flow.

The essence of the concept of managing transposition of material products is an integral approach to all its constituent elements: the protection, preservation, storage, transport, packaging and handling of products. Man is the most important factor in the integration of these elements. Acceptance of the concept of an integrated approach to transposition of material products can be achieved with the other main goal, which is the protection and preservation of product as well as leading potential negative impact to the minimum possible measure. Quality of material products depends on the number of factors and is subject to changes, especially on their way from manufacturer to end-user. The condition and length of storage and transport of most material products have great, and often decisive influence on the actual level of quality at the time of arrival at the end-user.
However, storage conditions of products and the way of they are stored and transported affect the preservation of the integrity of the product, ease of manipulation, rationality of using storage capacity and the means of transportation, the organization of work, the cost of distribution, etc. The data show that more than 50% of losses caused by deterioration of products can be avoided by selecting the appropriate preservation conditions, storage, transport and packaging.

2. MANAGEMENT OF MATERIAL PRODUCTS TRANSPORT MODEL

The transport in the narrow sense considers the transport of goods from one place to another. The transport in the wider sense includes all activities necessary for the performance of transport and other transport activities, storage and provision of goods and documentation during the transportation process. Transport has its justification in the fact that the place of production and consumption often don't match. From the standpoint of overcoming the spatial discordance of production and consumption, transport has a great significance for the economy, because it spatial coordinates production and consumption in the national exchanges, but also for the company, because it supports the company's effective exchange. Transport can be seen as:

- Input transport;
- Internal transport;
- Output transport.

Input transport refers to the transport of material produced within the company and transport of material gained from external sources. Transport of material produced within the company is internal transport, and transport of material from external sources is the external transport.
Transport of semi finished products is always performed by internal transport in the next order: plant-internal storage-plant-output warehouse.
Output transport refers to the transport of products that can be done partly by internal, and partly by output transportation.

2.1. Functions and effects of transport

Transport is done by transportation, transshipment, loading, unloading and storage of materials, semi products and products during the mentioned activities. Transport and storage connection is direct. Storage is more effective if we [4]:

- fuse the deliveries,
- use the space in the means of transport in an adequate way,
- choose the adequate routes.

Fusing the deliveries reduces the required amount of work and time for delivering a larger number of products. Transport releases storage space from the products that are saved until the moment of consumption and raises the frequency of stocking. As effectively the products are transported and saved in the transportation, as much the stocks are timely filled up. Premature transport leads to a greater quantity of material in stock, which "waits" for production or the increase in quantity of supplies of products at the sales outlet. Delayed transport, even with effectively performed functions of supply, can lead to delays in the production or sale. The concept of management of production and inventory provides security level of supplies, which eliminates the negative impact of transport on the production or sale. Transport also contributes to the satisfaction of customers, by offering the right product at the right place, i.e. to the place where consumer expects the product in the requested amount and with the expected performance.

2.2. Conditions for perfomning transport

To carry out transportation activities we need the presence of [20]:

- The means of transportation;
- Transport infrastructure;
- Equipment for traffic handling;

- Trained staff.

Transport receives support from the storage infrastructure. Adequate storage space is equipped with storage equipment and handling equipment. Warehouses monitor parking spaces for internal and external transportation means and space intended for sanitary-health care for drivers. On the parking places the repairs, inspections, vehicle fuel supply and preventive health and sanitary care of carriers (perpetrators of transportation activities) are carried out. Handling equipment can be manual, mechanized and automated. Manual equipment involves thrust or traction carts, mechanized equipment are forklifts, cranes, cranes-spoonbill for bulk goods and the like. Automated equipment is specialized in the form of integrated whole trailer crane with the burden on all three sides.

Trained staff is needed in the area of governance, management and execution. Particularly the drivers are expected to be able and willing to handle the products and documentation in the transport.

Factors that influence the decision on the transport are of internal and external nature. Internal factors are:

- Product characteristic;
- Delivery term;
- Company's financial capacity.

External factors are:

- Available capacity of the company or owner;
- Transport conditions;
- Development level of the supporting infrastructure on the way to destinations;
- State regulation;
- Consumers' demands and
- Market nature.

The nature of product defines the type and the way of transport. Industrial and consumer goods require different types of transport. Consumables products, depending on the degree of permanence, determine a decision on the type and way of transport. Dimensions and properties of products in each category determine further decision on the type and way of transport. Weight, mass, size, volume, height, length, shape, packaging, aggregate state, the corruptibility level and the sensitivity of the product to external influence set additional requirements in terms of their transport. Higher quality products also require special treatment in transport. Delivery term of products directly determines the choice of transportation means. The shorter the term of delivery, the transport should be faster and vice versa. An additional factor is the distance from the destination. The further the destination, the requirements for fast transport are more needed. If the company is financially stable and larger, with high frequency traffic, there are more possibilities to apply the strategy of their personal transport. Personal transport eases the management of the company to coordinate logistic activities. There is a possibility to effectively adjust the type and way of transport, type and nature of products, continuity of supply, storage, production and sales, the nature of associated infrastructure, the specifics and demands of the market. If the company does not have adequate transportation capacity, they will engage an agent, i.e. a transport company. Transport companies have a rich and wide supply of forms of transport, but however it happens that the capacities are not always free. Good relations of cooperation with the supply chain participants can optimize the decision on transport, by lending the capacity of transport or integration of transport. Conditions set by the transport company also significantly affect the decision on the type and way of transport. Supporting infrastructure development on the way to the destination influences on the decisions on transport. Plane can not transport the product to the destination to which there is no airport. This can be compensated by multimodal transport and selection of an optimal route. Requirements of consumers and the character are of great influence on the choice of types and ways of products transportation. The marketing has to propose adequate transport strategy manager trade, based on the researched consumer demands and characteristics of the target market.

2.3. Transport management, costs and quality of services relationship

Once the transport was a dominant logistics activity. Today, it is a very important activity of transposition of material products, and it best contributes to the efficiency of transposition of products. The purpose of transport management is the elimination of unnecessary costs, which will not reduce the quality of services and the time of delivery. Transport management has an obligation of permanent control of quality of the services and monitoring the flow of services execution. With the decision on transport, the company affects the sales price of products, delivery term and quality. Relation between service quality and cost that it causes, determines the decision on the transport. If the newly-selected type of transport exceeds the effects, and causes the same or lower costs in comparison to the previous, it becomes optimal at the moment. Contrary to that, although a changed decision on transport results in higher cost of products transport, it can raise the quality of the company offer, and the size of sales and profits, achieved by changing the means of transportation.From the standpoint of the amount of transportation costs (transportation cost-effectiveness), all the products can be divided into [7]:

- Products with low transportation costs (3-6% of the production cost),

- Products with medium transportation costs (7-12% of the production cost)
- Products with high transportation costs (12-25% of the production cost).

Low price of transport does not guarantee cost-effective transport. In addition to low cost transportation needs to offer safety, security and speed. These factors raise the transport cost.

Most products are sold in high competition markets and therefore in order to realize the savings, the company equipment is controlled. That can be done by:

- Prediction of consumption,
- Transport control,
- Tracking delivery,
- Order entry management,
- Equipment supervision,
- Process management.

Dependence of the decision on the total cost and the important factors on the basis of which this decisions are made is given in Figure 1.

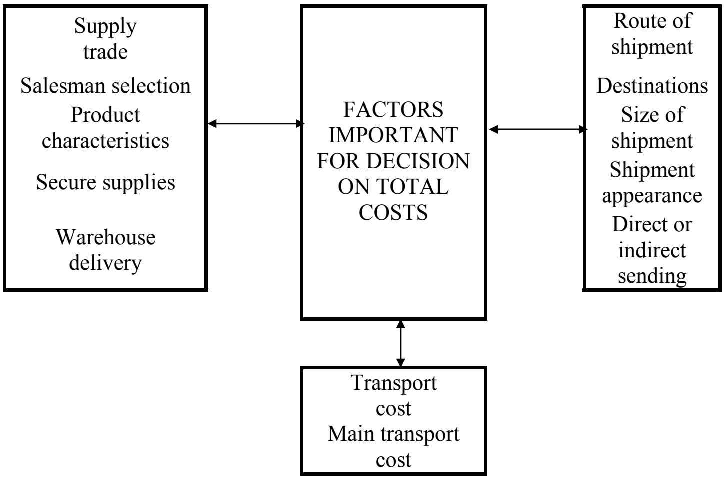

Figure 1: Dependence of the decision on the overall costs of the important factors in the decision-making.

Costs based on the individual activities can be used to help companies in managing and measuring the amount of logistics costs. Factors of overall logistics costs are:

- Transport,
- Resources,
- Communications,
- Company equipment,
- Handling,
- Packaging,
- Management.

Minimizing the total logistics costs can be realized through:

- Ordering, loading and unloading,
- Storage costs,
- Costs of secure supplies,
- Losses and damages,
- Deterioration in relation to the durability,
- Transport costs,
- Means invested into transit and storage.

Procedures and documentation have a strong impact on transport costs. Product exchange demands not only their physical transport but also the exchange of information, which are usually encoded in documents. The money flow as payment for the fulfillment of contracts, long procedures and documentation have direct impact on the cost of transit. When the documents that accompanied the goods are held, so is the goods.

2.4. Process in management of transport companies

International transport generally include the use of transfer modality, storage or transportation operations in the country of origin, transit or the country of final destination. Diversity of cultures, languages, and commercial practice in transactions lead to problems in the realization, because of which the management process must accurately define the activities of transportation companies.
Management process consists of the following phases::
- Planning,
- Organization,
- Staff,
- Management,
- Control,

Planning gives the framework for all the other functions of management. At this stage we determine the aim of the company, its business policy and strategy, with defining the tasks and resources for the achievement of goals. If traffic company wants to operate successfully in changing market conditions, it must have a serious plan. For effective planning, quality information are necessary. They are the most valuable tool that allows development of strategic management model through methods of central and participatory planning.
Organization as the second phase of management defines the organizational structure with the optimum combination of people and resources for the realization of the plan, and established goals. The process of organizing in transport companies is dependent from internal factors (type of transport services, transportation assets, infrastructure, technology, staff structure, size and location etc.), and the external factors (market, development of science and technology, integrated processes, etc.), organizational structure should be projected so that the aim of the company has efficiency.
The staff includes the provision of human resources with appropriate qualification structure. In order to do that, we carry out the following activities:
- Planning the staff in accordance with the long-term development strategy,
- Providing staff according to the adopted dynamics,
- Staff education and progress,
- Providing adequate working and living conditions.

Management is the ability to motivate employees in order to achieve appropriate goals. For successful management, the managers of trade need to use the appropriate management style, to activate and to stimulate people to work and to direct the energy onto the work that must be effectively done. Decision-making is the basic activity of managers in trade turnover, which is not only in their work but also on the activity of others and often to the whole organization.
Control means that the business events are held in accordance with the established goals. This means that the control establishes the indicators for monitoring, comparing and reacting to deviations, it order of consistence with the determined goals. It is particularly related to the activity of transport services quality control, traffic safety, people and finances.

2.5. Transport company strategic management

Strategic management (control) in the broadest sense can be defined as a conscious direction of the business in accordance with the relevant environment. This means that the basic purpose of the strategic management of the transportation is the need of companies for long-term assessment of changes bearing in mind the need for a successful adaptation to changes in the European and international traffic system. On the other hand selection of a development strategy is one of the most important and most complex questions in the business of each company, and also the traffic companies.
It is assumed that it is already known what technology will be dominant until 2015 and which technology will develop after that period. The traffic and transport, and their future development, will be under a significant impact of new technologies:
- Perfected information systems with optical processing of companies with large potentials;
- Expert systems in virtually all areas of the economy including transportation;
- Production, service and logistics systems integrated by new generation computers with speech recognition technology, forms and images with a computer, and use of new laser measuring system;
- Environment protection technology, use of waste materials and environmentally acceptable methods of identifying and exposure;
- New materials, predominantly composite type, with much better performance and less impact on the environment.

All these and other technologies will enable the development of new transportation technologies, technologies of loading and unloading, storage, production of new means of transportation and transportation equipment.

However, the biggest contribution to the development of traffic will give the application of information management technologies through:
- Increase of the quality of transport services,
- Development of new transportation service,
- Business rationalization,
- Increase of profitability, etc.

2.6. Management development trend in the developed countries

The concept of transport policy in the EU is based on the following objectives:
- Harmonization of traffic and the economy;
- Formation of an optimal transportation system structure;
- Reducing transportation costs;
- Rationalization of spending and energy;
- Environmental protection and preservation of space;
- Improving security.

Unified transport policy in the EU provides the transportation market liberalization and harmonization of economic conditions for all traffic branch. This policy provides the appropriate regulations and standards. This includes increasing the maximum weight of vehicles, the largest axial pressure and vehicle dimensions. We should also mention the very sharp quality standards, to which all countries that want to operate with EU countries must be adapted.

In Europe, it is understood that the transport infrastructure is the basic assumption of all the economic integration. For this reason coordinated EU policy includes coordination of programs and plans of the construction of international transport infrastructure, not only from the standpoint of the course selection, but also the mutual providing of financial funds.

In addition to global transport policy that is defined by the EU documents, the policy development of certain branches are also defined, such as: **International Railway Union** passed a White Book on the future of railways, the EU Commission passed the Green Paper on Post Office and Telecommunications. The road traffic is introduced with new technologies such as automatic management of vehicles through network, communication with drivers, including satellite connections, integrated management of traffic through the light signal, reducing the emission of harmful gases by using catalytic converters and microprocessor control of engines, as well as increasing security with a new seat belts system.

3. TRANSPORT MODELS AND THEIR FEATURES

Material products supply chains are:
- Railway transport,
- Road transport,
- Water transport,
- Pipeline transport,
- Air transport,
- Other transport models.

Manufacturers and retail salesmen have to constantly examine the productivity and efficiency of their transportation systems. According to two professional advisors, the producer and the retail salesman, maximizing the efficiency of transport can reduce the transportation costs from 10 to 30%. Savings are achieved by reducing the number of carriers, the conclusion of contracts at reasonable prices and eliminating of excess domestic and international transport services.

Railway transport is used to transport heavy, large dimension goods which has a relatively low value in relation to the weight (coal, grain, etc.). It is used mainly for transportation to remote places. It is a transport model with low costs, but it is not economical for the goods in small quantities, or for transportation to the shorter distances. Significant weakness of railways in relation to the carriers is that its services are slower and less flexible.

The use of railway services dropped down since the World War II, from 70% of goods, which were then transported by rail, to 38% as it is today transporting. Railway leads an aggressive campaign to increase efficiency in order to be competitive to the carriers and other forms of transport. Therefore, it uses twice bigger wagons and transports the goods to greater distance with savings up to 30% in comparison to carriers. An important factor that contributes to the efficiency is the integration of the railway, which increases the efficiency of avoiding overlapping routes, economies of scale and lower capital costs [2]. Railways tends to attract new customers by offering services of delivering goods on time in accordance with the system of production. Many railways use computer links with other transporters that allow transport of goods from one to the other carriers.

Road transport as opposed to the railroad, which is concentrated on the transport of heavy and stodgy goods to large distances, carriers are oriented to the transport of lighter goods on shorter distances. Today, about 25% of goods are transported by trucks, while up until the end of World War II trucks transported about 5% of goods. In many cases, the carriers are a direct competition to the railway. In comparison with the rail they offer better possibilities in terms of delivery of goods door to door and greater flexibility in the carriage of goods to different geographical destinations. Greater flexibility comes as a result of the increasing power of the truck motors and the use of special equipment (transport of frozen products, liquid gas). Carriers can have their own trucks, rent them from the carriers to perform all services including payment of drivers, mechanics, maintenance cost.
The carriers have three big limitations: limit the weight of goods (by the limitations of the amount of cargo on highways and bridges), higher costs in the long distances (compared to rail or water transport) and a longer time to travel long distances. The train can reach from Los Angeles in Chicago for 50 hours. To pass this distance, carrier needs two drivers that will rotate during the ride. It is difficult to find carriers for transport to such long distances.
Three significant innovations in carriers are: the use of cages, trailer and use of computers in the planning of routes of transport. Carriers with cage are often used by car manufacturers to deliver them to trades. These cages enable car manufacturers to make night deliveries, to reduce the requirements in terms of packaging and to ease the loading and unloading of goods. Night delivery shorten the time and reduce the cost of delivery.
Another innovation is the use of the trailers with so-called flexible walls on all sides of the truck. Around the solid material construction of the trailer, at the top of the trailer are rollers which are wrapped around with fabric. In this way it is possible to approach the goods from all sides, including the approach from the bottom. This innovation allows easier loading and unloading of goods. These trailers are used by 70% of trucks of "Federal Express" and "Toyota" for Just in time delivery to their factory. Computers are more often used in determining the carriers route. The driver gets the number of route with all the necessary information to adjust the demands of work. One of the system is so-called meeting transport where transportation is carried out at the local area, and then the exchange of full and empty trailer is being made. In this way, the need for warehouse is being eliminated.
Water transport is used for transport of bulky goods and low value goods. The transportation costs are low, transportation time is long, the transportation may be disabled in the winter conditions, and restrictions on water transport is also in the delivery areas (docks). Water transport is usually used to transport of bulky goods such as iron, grain, cement, coal, oil, etc. These products are transported by barges, cargo ships for bulk cargo, tankers for oil and liquid gas. As well as railways, the water transport uses containers that accelerate handling of goods and provide protection from moisture and theft.
Pipeline transport is characterized by constant movement and non-accumulation of supplies. Contrary to other models of transportation, pipeline is characterized by one direction flow and the transfer of only one product (one liquid). They are used mainly for natural gas, chemicals, liquid fertilizer, the products that can be transported in the liquid state. The main advantage is their reliability, low maintenance and operation costs, as well as the ability of continuous functioning (pipelines can work 24 hours a day). Disadvantages of pipeline transport are limited range of goods that can be moved through it, high fixed investment and low speed flow through the pipeline.
Air transport is a transport model that has shown the fastest expansion. It is used in the carriage of goods of high value, perishable goods and for the urgent great distance delivery. Air Transport Services are provided by specialized companies for quick shipments delivery. These companies are able to receive the goods in the early evening hours and to deliver them the next morning to the destination markets. The main advantage of air transport of goods in the speed of service, the savings due to reduced supplies (in transit and warehouses), reducing costs due to delivery speed and reduction of needs for public warehouses. The main disadvantage of air transport are high costs. Despite the speed, many short distance deliveries use road transport. Air transport must be coordinated with other forms of transport for adequate delivery of goods.

4. CONCLUSION

In recent years, there is a clear tendency to business innovation in the field of trade, based on the integration of trade activities in the transposition of material product whose important part is the transportation management. Segment of overall activities in material products transposition gains importance by applying new available technology and communication applications in the management of material products transportation process. Current trends in logistics of transportation services management show the need for a clear model of management of transport in which the important factors occur: transport conditions, costs, the quality of services, processes in the management of transport companies and setting the basic strategy of transportation companies. Unavoidable aspect of management transposition of material products is the inclusion of European experience into the practice of transportation companies that should be understood as the concept of integrating,

concentration and coordination of activities of transport activity based on current trends in European transport policy and its related activities: the formation of the European concept of the development of transport and traffic infrastructure, creation of constant logistics chains of transport and production, and promotion of European policy on standards of quality and protection of material products. In this way, we create the conditions for designing the system of material products transportation management in the international environment. International shipping and international trade goods include more participants and more documentation, which monitors the flow of products on their transport route.
Based on the considerations in this work we set the goals for the definition of a management system in the transport companies that will rationalize and increase the quality of management process. Based on the solutions that are confirmed in practice, the importance of model of management transport would be reflected in clear decisions of the implementation of transport material product features and integration and connecting of participants in the management chain on the micro and macro level.

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ОПРЕДЕЛЕНИЕ СОЦИАЛЬНОГО ЭФФЕКТА ОТ ВНЕДРЕНИЯ УСОВЕРШЕНСТВОВАННОЙ МОДЕЛИ СИСТЕМЫ СТИМУЛИРОВАНИЯ ТРУДА ПЕРСОНАЛА В УСЛОВИЯХ КРИЗИСА

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Резюме: *Исследованы критерии определения социального эффекта от внедрения усовершенствованной модели системы стимулирования труда персонала производственных подразделений машиностроительных предприятий, рассмотрены основные направления антикризисного управления трудом производственного персонала.*
Summary: *The investigated criteria of definition of social effect from introduction of the advanced model of system of stimulation of work of the personnel of industrial subitems of the machine-building enterprises, are considered the basic directions of anti-recessionary management by work of the industrial personnel.*

Ключевые слова: *систем, модел, исследованые*

Сегодня предприятия Украины сталкиваются с проблемами, которые порождены экономическим кризисом. Безусловно, специфика функционирования предприятий в условиях неопределенности и неустойчивости, отображается и на механизмах управления персоналом. В частности, система стимулирования труда персонала должна учитывать все изменения, которые происходят в материальной и духовной сфере жизнедеятельности человека [2].
Крайне важной в данных условиях является задача сохранения экономической безопасности предприятия. Экономическая безопасность предприятия – это наличие конкурентных преимуществ, которые предопределены соответствием материального, финансового, кадрового, технико-технологического потенциалов и организационной структуры предприятия его стратегическим целям и заданиям [5]. В приведенном исследовании более детальнее рассматривается элемент кадрового управления в условиях кризиса. В первую очередь, необходимо ясно понимать, что задание антикризисного управления персоналом складывается в сохранении квалифицированных специалистов и поддержке оптимального уровня производительности при значительных колебаниях финансового обеспечения производства [3].
Основным разделом антикризисной программы должно быть информирование персонала о положении дел на предприятии. Информация для работников должна содержать:
- характеристику ситуации, в которой находится компания;
- наиболее вероятный вариант развития событий в случае, если не будет приняты антикризисные меры;
- запланированные мероприятия по преодолению кризиса и ожидаемые результаты от их реализации;
- программу выведения компании из кризиса и роль сотрудников в ее успешной реализации.

«Прозрачное» функционирование системы стимулирования труда, с одной стороны, позволяет сохранить на предприятии ключевых сотрудников и не допустить существенного снижения производительности труда, а с другой стороны – обеспечивает бесконфликтное сокращение численности персонала. При этом стимулирующими факторами для руководителей могут быть разработка четких программ преодоления кризиса, понимание того, что все лучшие способности, обнаруженные в данной ситуации, станут залогом будущего успеха. А для работников стимулом в условиях кризиса является

участие в принятии оперативных решений в рамках общей стратегии предприятия, информированность об изменениях и перспективах внешней и внутренней среды функционирования предприятия, поддержка чувства команды.
При этом в случае уменьшения части материальных стимулов в общей системе, и руководители, и работники, должны быть извещены о причинах и целях всех изменений. Если работник точно знает, на какой период времени и с какой целью снижается его премия, он легче перенесет собственный финансовый кризис. А если работник уверен в том, что руководство предприятия не чувствует паники, его морально психологический состояние не будет значительно изменено. И состояние тревожности не перерастет в решение об увольнении. Работники должны знать, что только в случае объеднання усилий, кризис может быть преодолен.
Если будет потребность безоплатных отпусков, весь персонал должен знать, что это явление временно. И насколько сложной ситуация не казалась бы сегодня, завтра произойдут новые изменения, более благоприятные для развития предприятия.
В условиях кризисов, и в послекризисный период, особенно актуальным становится вопрос о целесообразности расходов на диагностику и усовершенствование системы стимулирования труда персонала. И здесь необходимо отметить тот факт, что в основном расходы на моральное стимулирование не превышают затрату на материальные поощрения эффективного труда персонала. А при построении системы стимулирования труда на основе развития культуры предприятия, учитывая взаимодействие субкультур персонала производственных подразделов, руководство получает социальный эффект, который безусловно влияет на улучшение экономического положения предприятия. Об этом говорит уровень финансовой стабильности анализируемых предприятий. Чем больше развитая на данном предприятии корпоративная культура, чем больше внимание уделяется комплексному стимулированию труда, тем выше престиж и конкурентоспособность предприятия на рынке. Социальный эффект на предприятии определяется путем сопоставления основных параметров трудовой деятельности персонала, оцененных до соответствующих изменений и после организационных изменений.
В ряде производственных подразделений ОАО «КЗТС» были проведенные беседы, элементы деловых игр, направленные на повышение чувства команды и стремления к инициативе.
В течение двух лет контрольные группы рабочих и руководителей работали по усовершенствованной модели системы стимулирования труда. По окончании времени эксперимента, в группах был проведен повторный опрос с целью определения ценностных ориентаций работников и руководителей (табл. 1).

Таблица 1: Ценностные ориентации персонала производственных подразделов в динамике

Ценностные ориентации	2006 год		2008 год	
	Оценка рабочих	Оценка руководителей среднего звена	Оценка рабочих	Оценка руководителей среднего звена
1. Отношение к работе				
Соответствие работы способностям;	9	6	9,6	7,75
Интересная работа;	5,4	8,3	6,4	9,25
Ответственная работа;	6,6	7	6,6	7,5
Возможность продвижения.	4,5	9,2	5,75	9,7
2. Взаимодействие с коллективом				
Товарищи на работе;	5,8	5	6,8	5,75
Отсутствие давления;	7,9	5	8,5	7,6
Возможность инициатив;	3,8	7,8	5,8	8,5
Общение с людьми.	7,2	7,5	7,7	8,7
3. Позиция относительно общества				
Полезность для общества;	5	7,5	7,5	7,8
Надежное место работы;	8,9	7,8	9,8	9,75
Возможность чего-то достичь.	5,7	8,9	6,8	9,75

На основе аналитических данных, были построены сравнительные диаграммы, которые иллюстрируют социальный эффект внедрения усовершенствованной модели системы стимулирования труда персонала производственных подразделений машиностроительных предприятий на примере ОАО «КЗТС» (рис. 1, 2).

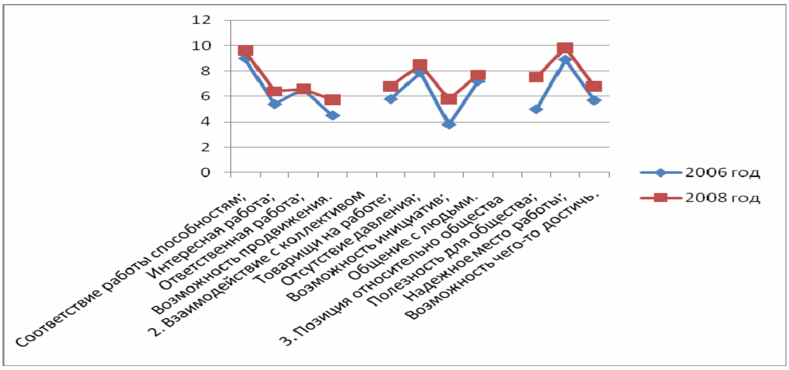

Рис. 1: Соотношение ценностных ориентаций рабочих в динамике

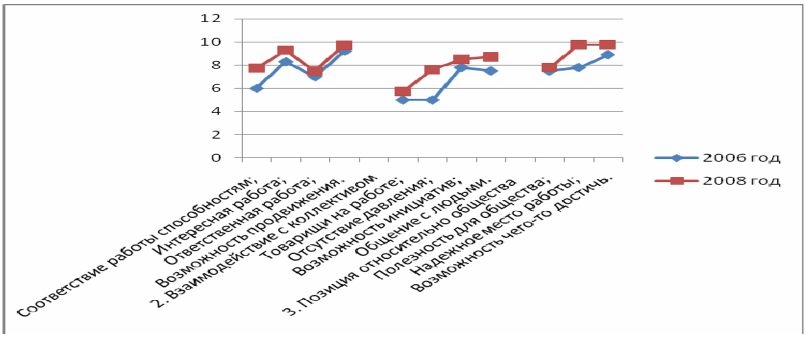

Рис. 2: Соотношение ценностных ориентаций руководителей в динамике

ВЫВОДЫ

Социальный эффект от внедрения усовершенствованной модели системы стимулирования труда определяется повышением инициативности и заинтересованности в работе среди рабочих и повышением ценности дружбы, общения, с людьми среди руководителей. Кроме того, по всем категориям персонала отмечается значительный рост ценности надежности рабочего места, которое отображает особенности современного состояния экономики страны.

В предыдущих исследованиях по данной теме автором была определена корреляционная зависимость между уровнем единства субкультур персонала производственного подраздела и выработкой. Исследования в этом направлении должны быть углублены. В последующей работе целесообразно определить взаимосвязь между изменением уровнем единства субкультур персонала и временем простоя оборудования, с помощью положений теории автоматизации управления построить структурную схему системы субкультур персонала производственных подразделений предприятия и рассчитать ее устойчивость.

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KNOWLEDGE AS A FACTOR OF SUCCESS IN PROTECTION OF LIFE ENVIRONMENT

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Summary: *Man has finally realized that in the natural order are no unlimited natural resources. Strategy for survival of human civilization requires a different attitude towards the environment. Ecological crisis is a big part of unbreakable civilization events. First of all, deep crisis of one way of production, model of consumption and economic growth, with the loss of basic human values. Such a way of life brought the man from the balance with nature, which he is a part of, and it can only restore the fundamental socio-cultural changes in the way of production and consumption.*

Key words: *ecological knowledge, environmental awareness, education*

1. INTRODUCTION

In today's time of global ecological crisis, education and education for the preservation of the environment is, in addition to timely and true information, legislation and environmental legitimate investment, set as the most important task, because most influence on the creation of environmental awareness and ecological behavior. Environmental awareness not only make findings about the relationship of nature and society, about the harm to ecological balance and the need to protect the environment, but also the conscience, and the willingness of individuals and social groups to engage in the protection and to be responsible and environmentally justified related to the environment in which live.

2. LEGACY OF THE EARTH

Central signal time in which we live, in the 21st century concerned primarily questions of ecology, universal story, climate change and global warming. We live on a jeopardized planet. The reality is that we live on the Earth. We have only one Earth. This is our home, and is currently very vulnerable due to global warming and climate change.
2000. The International Commission Charter countries adapt to the text of this document. Charter group includes four principles:
- Respect and concern for community life
- Ecological integrity
- Social and economic justice
- Democracy, non-violence and peace.

Ecological integrity includes the protection and preservation of ecological system in the country, preventing the damage that is applied to these systems, and adjust production and consumption patterns, which saved the country. The Charter sets out a challenge to the country before mankind to develop environmental awareness in order to develop a new sense of global interdependence and general liability.

3. GLOBAL WARMING AND CLIMATE CHANGE

Although scientists and ecologists send a number of disturbing signals during years that the land is in the bad faith which is caused by of carbon emissions in the atmosphere, only recently it came to man's consciousness and has upset us.

Country suffers because of escalating effect of green gardens, which are all less heating energy emerged in the country is reflected back to space. When agriculture was formed, before some 10,000 years, in the atmosphere was 160 parts of carbon dioxide to a million. Industrial revolution has increased this to the 280, while the estimated today that the 380th During the last 20 years, the concentration of CO_2 in the atmosphere increased enormous rate of 1.5 on an annual basis.

This led to Arctic beginning to melt. Ice to the Antarctica disappears. Snow cover and glacier Alps reduced. Snow top Kilimanjaro in Tanzania are also melting. Cycles of rain falling in Africa are seriously affected, with some areas that are under constant dry, while other endangered by floods.

Melting ice and glaciers raises the level of water in the sea. Nobody knows whether we have crossed the line after which no return or whether the caused damage is one that can not be repaired. Scientists like James Lavlok predict catastrophic floods at coastal cities in the U.S., Europe, Asia and Africa, which would lead to the destruction of human civilization. Only a small number of people would survive who live in the Arctic, because there would only be possible to produce food.

The effects of global warming and climate change planetary call to dramatically change the way of life, in order to preserve the land. Lavlok propose an urgent move to nuclear energy, while others advocate the reduction of the use of fossil fuels, like oil and gas and the use of solar energy and wind with the emergency changes in personal spending power.

4. INTERPRETATION OF SIGNS WHICH WAS IMPOSED BY THE TIME WE LIVE IN

In response to the ecological characters of time, humanity is called to make new decisions in order to preserve the land. These are moves ecological love and care for the planet. They require a new asceticism in the manner in which we live, which will weight in the life of people, for example, the United States, but will affect the future of the planet. This is, in the end, the only home that we have. If the earth to a large extent the effects of climate change due to changes, we can not escape to another planet. On this planet we are together as one big family

These dramatic signs of the time in this way provide new, key matrix observations, as personal, and social.

5. ECOLOGICAL CONSCIOUS: A LINK WITH LIVING WORLD

Jan Mekalum, South African medical doctor, psychiatrist and poet stresses that the development of ecological awareness of the imperative of time in which we live. The concept helps us to clearly perceive the relations are strong phrases such as' network of life. It teaches us to understand that the overall creativity is only one message: We are one.

Environmental awareness concerns the speech, but the work. This includes action in order to create and decision-making for the benefit of our future generations. Create and decides today for those who will live 2182nd year, which means 170 years in advance.

Environmental awareness emphasizes that the past lives in our bodies, and we are on the way connected with other living beings in our anatomy. Pol Meklin is 50 years of last century, presented the theory triple nature of the brain: the brain of reptile, brain of early mammal and neo mammals or human brain. Environmental awareness recognizes these ancient anatomical connections with other living beings as continued signs that the existence is one.

Environmental awareness live with the truth that is of great burst before about 14 billion years, all connected and that it will all be connected. The first atoms of hydrogen from this period are with us today. Atoms of iron in our blood come from an explosion in the Supernova, which has led to the existence of country. In this way, environmental awareness is a way of thinking and understanding of ourselves in the world, the ways in which refers to the earth, nature, your created reality.

The environmental awareness refers to the life in the fields of mind, which is multidimensional and connects past and future with present. Mind field includes language, culture and common values of special groups and mankind as a whole. For example, the Internet is a significant phenomenon of the field of mind 21st century, which easily connects people of different cultures on different continents.

The most important characteristics of ecological awareness are the essence of its connection. In many African languages there are sayings that could be translated as' people are there, thanks to mutual relations' or 'I exist because you exist, you exist because I exist.

Environmental awareness is a life in the network of life that is a primary understanding of reality and attempts to make it in all we do.
Environmental awareness will occur only if you combine our rational knowledge with intuition on nonlinear nature of our surrounding. This intuitive wisdom is characteristic of traditional, uneducated cultures, especially American culture of Indians, in which life was organized around a very noble consciousness about the environment. (Kapra, 1982)

6. ECOLOGICAL KNOWLEDGE

Traditional ecological knowledge (TEK) is collected for thousands of years of experience in direct contact with the environment of mankind. Although the term TEK started to use only 80-years of the last century, in practice it was only after the star as the ancient culture of hunters. In addition to ecology, the study of traditional knowledge in the price of a large number of disciplines. For example, in agriculture, pharmacy and so on.
The earliest start systematically studying TEK is anthropologists. Ecological knowledge as it studies entomology (approach that focuses on the understanding of ecological relationships that exist among the people or culture), can be considered ethno Science (National Science), which Hardest defined as observance of system of knowledge that the culture developed to classify objects, activities and events the world.
Pioneering work Conklin and other documents that are traditional people like Filipinas hortycultorologist hold very detailed knowledge of local plants and animals and their natural development, recognizing some 1,600 species of plants within one family. And other forms of self-knowledge are recognized and respected by scientists. For example, Arctic ecologist Prut decades used the terminology language Eskimo name for different types of snow. In our language there is no sufficient number of words that describe the various forms of snow and ice, using the words Eskimo language, in order to refill this gap.
Increasingly recognize the ability of ancient farmers, water engineers and architects. Increased respect for ethno-science, as the ancient, and modern, is time to accept the validity of traditional knowledge in a number of disciplines. The ancient ways of cognition began to gain in importance in a number of disciplines, including ecology. Various publications show that many indigenous groups in different geographic areas of the world, from the Arctic to the Amazon, have their own systems of resource management. In that way, recognizes the feasibility of applying TEK to the contemporary problems of management resources in different parts of the world.

7. DEFINING TRADITIONAL ECOLOGICAL KNOWLEDGE

In literature there is no widely accepted definition of traditional ecological knowledge. The term is by its nature ambiguous, because the same words and traditional ecological knowledge twofold. In lexical terms, refers to the traditional cultural continuity, which is transmitted in the form of social attitudes, beliefs, principles and conventions of conduct and practice that has emerged from the experience gained during the years. However, society changes over time, always accepting new practices and technologies, and thus making it difficult defining how and what kind of changes would be affected to call it traditional.
For this reason many sciences avoid the traditional term. At the same time puritans considered this term unacceptable or inappropriate when applied to society such as indigenous groups from the north whose way of life is significantly changed. For that reason, some believe the term self-grown ecological knowledge acceptable, because allows to avoid the debate on traditional and directly put emphasis on the indigenous peoples.
The term ecological knowledge itself imposes a definition of the problem. If the ecology narrowly defined as a branch of biology in the area of western science, then strictly speaking, there is something like TEK. The greatest numbers of traditional people are not scientists. If the ecological knowledge is defined broadly to apply the knowledge, no matter how acquired, on the living beings as mutual and those with their environment, then only can be considered sustainable.
Studying the elements of TEK and its meaning in the most exposed to the works in this field and compose the most important attributes given in these sources, it can be to get to the following definitions.
It was only after the total amount of knowledge and belief in the relationships of living beings (including people) with one another and with their environment, which is transmitted through generations of cultural exchange.
TEK does not aim controlling nature. TEK is the integrated system of knowledge, experience and belief.

8. EDUCATION FOR ENVIRONMENTAL PROTECTION

Education for environmental protection in the function of sustainable development and therefore it is necessary for all the inhabitants of planets and must be long-term planning and development interdisciplinary knowledge about the environment during the entire life of man. The aim is to develop awareness of the basic characteristics of the environment, on the relationship between her and her, as the human striving for the preservation and development for present and future generations.

It is necessary to the educational process provide interdisciplinary and multidisciplinary working knowledge of the point: society, man, technology, natural environment, and express the integrity of the aspect of ecological, economic, social, technological, cultural and aesthetic content.

Education for environmental protection

- Must include all levels of education, from preschool through elementary and oriented to the university. It should be included in all forms of teaching in the school, in many activities outside of school and student organizations;
- Must continue to work organization, through the professional training of workers in some workplaces, in order to reduce the possibility of endangering the environment in the workplace;
- You can not come to the training of people for passive protection, but it should be direct to the positive attitude on the training of citizens for a planned development environment with all its resources and human creations.

To realize these objectives, it is necessary to prepare the national strategy of harmonizing the educational process at all levels with the principles of sustainable development and a new philosophy of life and environmental ethics.

9. CONCLUSION

Today the people, who contribute to the use of science and practice, have the ability to predict changes in the environment, as well as the consequences that may result from these changes. Today science is able to come to new knowledge, the old values and opinions, and point to one idea and not the largest, does not solve all the problems, good solutions to our future can become problematic for the existence of society. The question is whether a victory over the nature of the consequences of planned products that can be controlled, or they can not be controlled by society, because they were in accordance with the time and space in which they obtained. World comes to the future in which the risk concentrated and complex. Therefore, should affect the policy to reduce this risk through preparation, relief and adaptation. We have only one planet, now and in the future. We need to think more about the use of smarter.

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ORGANIZATIONAL BEHAVIOUR AS AN INSTRUMENT OF CORPORATIVE SUCCESSFULNESS

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Summary: *Classical management pays little attention to human dimension within organization, neglects its essential importance for efficacious and effective business operations. Classical management could not have accomplished greater success measured in financial effects, but principally in satisfaction of employees, clients, that has finally been reflected also on the profitability as the final purpose of any business operations. Even though, profitability is a basic and often the only aim, under new conditions the emphasis is on the satisfaction as a new system of values that should lead also to the appropriate results. Meaning that the satisfaction of employees and clients is not the aim, but the means for accomplishing greater successfulness measured in financial effects.*

Key words: *organizational behaviour, organization, employees*

1. INTRODUCTION

Management of organizational behaviour has especially become significant under conditions of turbulent changes occurring in any segments of economy and society, at the macro, mezzo or micro levels. New technology, new organizational solutions and new concepts of management are responses to the challenges imposed by a market, clients but also by other constituents through which business and organizations tend to accomplish their goals and interests. Research and tendency to find an appropriate way of managing the organizational behaviour contributes to greater successfulness of any level of economy and society. The key of a successful business is reflected at an ability of placement the right people at a right place. An individual that is placed at the appropriate job which is adequate to his personal affinities will put maximum efforts to fulfill the set organizational goals, and vice versa. Emphasizing the individual or leveling with an organization goals is a new approach different from the classical approach and it is applied in successful organizations.

2. DEVELOPING OF AN ORGANIZATION FOCUSED ON THE EMPLOYEES

The truth or lie? Are people the most worthy active part of an organization? Are they the key of success in today's competitive world economy? Before retiring from General Electric from the position of successful and esteemed General Manager, Jack Welch stated: “I am spending all my time on people. The day we ruin the thing with people, this company has failed.” Has Welch been telling the truth, has he also, during his managing, been complying, i.e. behaving towards the employees the way he spoke? Opposite to Welch, Scott Adams, a famous sketcher of funny comics, shows with a lot of humour management, activities and characteristics, has different, namely, completely opposite attitude. He considers that the statement often heard in business circles and ordinary life that “The employees are our most worthy resource, namely, the potential”, is probably at the top of the list of the greatest lies on the world when it is about management. This causes serious troubles. Has the typical manager only declaratively stated that people are the most important resource? If so, what are the implications of the hypocrisy on the organizational productivity and welfare of the employees; and if not so, by which arguments to justify it?

Jeffrey Pfeffer from Stenford University and his colleagues have recently given instructions lights for this dilemma. Accordingly, they concluded:
There is a significant body of evidence developing promptly, some of them are methodologically sophisticated, telling about a firm link between the way of a company managing people and the economical results accomplished by it[12].
Dilemmas do not arise only from the statements of the mentioned people. The precise analyses show that management does not know the real value of an individual, i.e. economic science has not established a methodology for evaluation of value of an individual. Thus, we come to a paradox that the price of even the smallest spare part is known, or of any other material, namely the price of tools is known, but not the value of a man.
The dilemma is related to the unquestionable fact that something not known, namely the price of which is not familiar, cannot be valued, especially if it is about the most precious things. In that sense, business performance of the most successful companies does not show the value of human potential, i.e. the value of intellectual capital. This item, or items simply do not exist in balances or in other financial statements; but it would be necessary for the purpose of showing a company's values, in order to adequately manage human potentials and resources. In practice it is shown that business, as well as any other persons, behave in one way towards valuable, and in a completely different way towards the less valuable objects.
Also, behaviour of management towards people is the second unquestionable fact telling us that people are not the most valuable resource. Namely, classical behaviour of management towards its employees is based on classical and overcome concepts characteristic of a period from several decades ago. The basis of that behaviour included "a stick and a carrot", i.e. sanctioning and rewarding. In past times it has given specific results. However, under modern conditions it is shown that neither using the old concepts and methods the problems of today cannot be solved, nor that using the actual knowledge and concepts will problems in the future be solved.
In ordinary, everyday life it can be heard from business people and managers that they are speaking about individuals appreciatively: "This is my right hand" or "This is the most hard-working executive". Rarely you can hear the statement like: "This is my brain", or "This is the smartest employee of the organization", which would be natural that the people, i.e. employees are really considered to be the most valuable element of an organization. There is no material evidence that people are the most precious resource of any organization. It is only about a declarative statement, transforming into a kind of tautology taking on the elements of ideologizing and politization. It has been confirmed by history many times, showing that people mostly died from the sword of rulers and dictators who spoke the most about concern for people.

3. CORRELATION BETWEEN ORIENTATION TO EMPLOEES AND SUCCESSFULNESS

Researches performed by Stanford University, namely by Jerrey Pfeffera, have shown the correlation between their successfulness and relations that management has had towards the employees. The researches of companies from the USA and Germany have given an example that the orientation towards people and their potentials significantly increases the profit and decreases the fluctuation of the employees. Their analyses have shown that the orientation towards the employees can be determined by the following seven parameters [12]:
- Job security (in order to eliminate the fear of dismissal)
- Careful employing (an emphasis on accordance with a company's standard),
- Authorising the employees to make decisions and solve the problems,
- Regular and satisfactory payment of the accomplished output,
- Complete training and permanent education,
- Less emphasis on the status and
- Building the trust (by sharing the critical information).

These elements of orientation towards people should be considered as a whole. A management, based on the mentioned seven partial parameters for the evaluation of orientation towards people, should make a marketing mix, i.e. a skillful combination in order to the employees in greater extent for the ideas of the management. In other words, the separability of the above mentioned criteria does not provide the satisfactory results.
The dark side of the research on this subject is that the mentioned cynical remark of Scott Adams frequently becomes a reality. A management dismisses its employees under an excuse that it is about the technological surplus, often even those employees that are old and that cannot find an employment in other companies. They do so, because the employees are first of all considered as an expense, i.e. they tend to decrease, as much as possible the costs of manpower as well as other costs. Often, the only solution in decreasing the expenses is seen in dismissing of employees, even though they do not participate to a larger extent in the total expenses, again bringing in question the real orientation of management towards people.
The successfulness of organizational systems does not have to be a result of orientation towards employees, it is often rather a result of a monopoly position, introducing of scientific-technical progress, excess exploitation of

people and separating minimum resources for earnings and other material compensation. It is also possible that a successfulness of an organization is based on a favourable organic composition of the capital, namely by introducing robots as workpower and information technology and techniques.
Regardless of the mentioned, the fact is that there is a great difference between statements of management about human resources as the greatest organizational value and actual behaviour. According to Pfefferu: „ Only 12% of today's corporative organizations have a systematic approach and persistency to qualify as real organizations oriented towards people" [12]. Thus, only the every nineth organization is showing a positive orientation towards people, bringing them into the level of greater competitive advantage on the market. It further means that over 80 % of corporative organizations do not have any orientation towards people, harming those organizations, their employees and national communities.
The previously mentioned percentage is certainly greater in countries undergoing transition and in organizations functioning at the bureaucratic principles. This percentage leaves a great space for management action, especially when it is about their organizational behaviour.

4. MODEL OF 4 P'S AS A CONDITION FOR A SUCCESSFUL ORGANIZATION

Management must have into mind that there are the greatest potentials in people and that they can to a great extent replace the other resources. Human potential has the greatest reserves that are not used even minimally. The reasons, among other, are also in inadequate organization behaviour and organization ambient existing in organizations. If of the mentioned 88 % of the organizations non-oriented to people, according to the analyses, only 10% of them would transform into the ones oriented to people- it would be a great success.
This statement is especially significant in modern conditions with high presence of application of information techniques and technology. Many theorists believe that introducing modern technology decreases the need to focus on human potential. In practice it is completely opposite. The more the organizations become more mechanistic and informatically equipped, the more they will change the attitudes on and relation at work and about work, and even towards the ordinary life. In such circumstances, management must be more focused at people. Financial indices, growth, profit, are all extraordinary things; but all of the mentioned have been accomplished by people, namely the employees, customers and the environment in which an organization is functioning.
With regards to it, it is useful to note the following statement: "When we founded PeopleSoft, namely the global supplier of applicable softwares, we have formulated the three basic principles, being the following [17]:
- Making the customers satisfied,
- Having fun
- Be profitable

To be profitable means accomplishing an effect that is to be larger than the resources spent, namely the input. However, such an effect should be accomplished in a relaxed manner, without tensions and especially not on the account of the employees. People who work are also having fun, and they are, as a rule, more successful, they are more polite to other people of the organization, they become loyal to organization and provide more quality services to the consumers.
That is why the greatest number of successful Executives Managers points out that heir crucial task is to work with the employees and the customers. This is the new fact in economy based on human potentials, namely on the knowledge as the most important resource. In other words, the job and philosophy of management has radically changed related to the classical point of view. The management is not primarily present to give answers and instructions how something needs to be done, namely to control the employees; but rather to create a favourable ambient in which the employees would be able to create ideas and realize them in practice. Giving commands is unacceptable today; acceptable is only defining the objectives together with the executives and supporting all of the constituents of the organization to accomplish those objectives.
In practice it is shown that successful organizations today are ruling and accomplishing the strategic results by systematic connection of four basic elements of every strategy, expressed as 4 P's: people, productivity, products and processes.
The key activities arise from people and are transferred to products, i.e. services, processes and productivity. All of the elements of the strategic accomplishment of the results are mutually connected thus affecting each other. The 4 P's Model emphasizes the importance of a constant advancement in all aspects of organization in order to meet the more demanding customers and increasingly stronger competitors. In organizing of the mentioned elements, a key role and influence is the one of a management, primarily the strategic management. That is why the existence of highly professional management and managing infrastructure presents a significant competitive advantage that can be valorised.

5. A JOB OF A MANAGER IS WORKING THROUGH OTHER PEOPLE

Managers affect the lives of employees in many ways in good as well as in bad times. Schools, hospitals, government agencies and major and minor business- they all require a systematic management. Formally defined, management is a work process with other and through others in order to achieve an organization objectives at an efficacious, effective and ethical way.

From the point of view of organizational behaviour, the central point of this definition is “working with other people and through other people”. The successful managers of today have more visions and actively formulating the policy for accomplishing of the set objectives in an ethical and sensitive way. The effective managers are team players, brain trusts that plan, organize, lead, coordinate and control in teams work, primarily human, material, financial, information and other resources, for the purpose of accomplishing of better results. Henry Mintzberg, the renowned management scientist, has noticed: “None work is as important in our society as the job of a manager is”. The manager is the one making decisions whether the social institutions well service us or are just spending our talents and sources [11]. Even though this is about determination of management provided three decades ago, it has remained valid today and a great number of authors’ calls upon this definition. A similar definition was given at the end of the second millennium by a famous Nobel Price winner Samuelson [15].

Since a management is working through other people and for other people, but also for himself, the way of his behaviour significantly influences at the measure he will win over the employees or the customers so that they are in the function of the organization. That is why a justifiable question is posed, what, in fact, a management and managers do, i.e. what should they be doing and what knowledge and skill should they posses?

The probably best answer to the question is “Nothing”. Thus, managers do not do anything, they work with and through other people. Management doing business is a bad management, because, as a rule, while he is working a great number of people doesn’t work, decreasing the productivity, namely the successfulness of the organization.

The observation studies of Mintzberg and other theorists of organization and management have stated that a typical day of manager consists of a fragmented collection of short episodes. The interruptions are constant, while the time for thinking and planning is short and the demands for a quality decision are getting bigger and bigger. In a specific study, four of top managers have spent 63 % of their time on the activities that lasted individually less than 9 minutes. Only 5 % of the managers’ time has been dedicated to the activities lasting more than an hour, speaking itself about the complexity and effort it is about [9].

So that a management could successfully perform the business through other people, it is necessary that he possesses certain knowledge, skills and capabilities.

With regards to the knowledge, management must possess primarily knowledge of the organization, managing, financing, cost management, management psychology, communication, etc.

With regards to the skills required for managers, it is significant to mention a research performed by Clarck Wilson et al. His research has pointed out to a need that managers should have the following skills [18]:

1. Clarifies the objectives to all included
2. Encourages participation, direct communication and suggestion
3. Plans and organizes so that the work would flow normally
4. Has got technical and administrative expertise in order to answer the questions regarding the organization
5. Eases work through team building-up, leadership and support
6. Provides a feedback in a correct and constructive manner
7. Starting business fulfilling the schedules, deadlines and reminder
8. Controls details not being too tiresome
9. Applies a reasonable **pressure for accomplishing the objectives**
10. Delegates and gives authorization over key business to others, while keeping the objectives’ defining and motivating.
11. Recognizes a good behaviour by giving awards and positive encouragement

From the table it is noticed that Wilson’s profile of managers’ skills is focused at 11 observative categories of managers’ behaviour. This is in accordance with the current emphasis on manager’s capability. Wilson’s unique technique of the skills evaluation goes beyond the usual approaches. Besides observing a manager regarding his 11 skills, his approach also asks from those submitting the report to the manager to respond to the questions about the skills of their chief. According to Wilson and his colleagues the result is an evaluation of mastership of the skills and not only of knowledge of the skills. The logics of Wilson’s approach is simple and challenging. A manager should never evaluate and give mark on himself because it is subjective. It is shown that no one can

evaluate the skills of a manager better than the ones that come across such a behaviour every day. Namely the ones submitting the everyday reports and communicate directly with the management.
The notes of Wilson can be discussed, whether they are complete and to what extent they reflect the requirements of modern management. Regardless of the afore said, the fact is that the skills provide three necessary messages that can be useful in studying of the organizational behavoiour, being the following [14]:

- Effective work with people is the essence of management activities and of a profession in general. The skills given in the previous Table of creating objectives/ dedication/ feedback/rewards/ contribution with human resource included in each part. From the integration of the mentioned skills and their mutual energetic action, the successfulness of the management itself will depend in winning the people and influencing on their organizational behaviour and actions.
- Managers with mastership of the skills have a better, i.e. more successful leadership over the individuals and greater moral of the employees than at the managers with less mastership of the skills.
- Effective female and male managers do not have significantly different profiles of the skills, opposite to statements of a popular business press from earlier years that profiling of male and female managers is different and that, accordingly, gives different effects.

Management has become a profession possessing its own knowledge and skills for managing organizations, as well as any other profession also possesses.

6. MANAGEMENT OF 21ST CENTURY

In the future the way of managing will significantly change. Essentially, the classical management and classical organization will disappear which is a characteristic of the twentieth century.
Instead of a universal concept of management and looking for the best methods and styles, a flexible management is established, where the customers and employees are the most important factors of a successful business. Instead of an individualistic way of managing, more significant becomes a team work and a team action. Communication will, judged by anything, experience the greatest changes; which is understandable regarding the dynamical development of information techniques and technology that have changed not only a workplace and organization design, but also the managing and cooperation with all of the constituents directly or indirectly participate in an organization.
The managers of 21st century will be team players that will do things cooperatively, relying on making mutual decisions, on their knowledge instead of formal authority and their multidisciplinary skills. The management of the future will be focused on long term learning and shall be compensated based on its acquired skills and results. They will make easy, and not obstruct changes, they will share the power and key information instead of assuming them and they will be multidirectional communicators. The ethics will be something thought of in advance and not when it is too late, i.e. it will be a composite part of any activity. Thus, we reach the conclusion that economics, ecology and ethics will be the three foundations of economy and society of every country.
„The management will face the general re-questioning of the prejudices" [10]: reorganizing, re-engineering, analyzing and redefining of their own objectives, repositioning and searching for the new purpose.
"In the world of increasing incomes, especially in high technologies, all of these "re-terms", namely general re-questioning has become necessary because any time the challenges and demands change the company must also change. It must find its purpose, objectives, mean of work again. In short, it must adapt and the adaptation never stops" [10].
One of the slogans often heard in the business world of today is: "Work smarter not harder". Working smarter and not harder is the key of success of every organization.

7. CONCLUSION

Today's organizational behaviour implies developing of an organization oriented towards people and their skills. It is considered that people are a key of success in today's competitive global economy. Today the most valuable resource and potential of organization are people, the element of an organization without which no organization can be imagined.
Management must articulate the organizational behaviour that will bring the results, i.e. it must create an organizational culture that will increase the competitive advantage on the market. Thus it can be concluded that organizational behaviour is not an objective, as it is often thought, but an instrument that should lead the company to a specific goal.
The key role in increasing the successfulness of an organization have the managers by appropriate usage of powers and by eliminating the misuse, by enhancing of mutual relations between people, by good communication and the ability to make a diagnose and then to solve the conflicts within the organization.

As the world we live in is moving from industrial economy to economy of knowledge, management must realize that unless it radically changes the way of working, it will simply have no chance to maintain the success in the existing business environment that is rapidly changing. Meaning that the management must be prepared to stop working in a way which was effective in industrial economy and that it must adopt new approaches adapted better to the new situation.

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COMPUTER SYSTEMS – PRECONDITION FOR RAISING THE ATTENDANCE LEVEL OF USERS

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Summary: *The application of computer systems for raising the level of attendance of users leads to a revolution in the trade with goods and services. The evolution at computers imposes the differentiation of a new sybsystem, i.e. "digital distribution", in the system of the total distribution. In the present paper the authors reveal in front of the public circles new opportunities for raising the attendance level of users owing to the improvement of computer systems and data base. In maintenance of the theoretical formulation, the authors present real examples from Germany which reveal the tendencies in trade for the next ten years.*

Keywords: *electronic trade, attendance of users, Personal Shopping Assistant (PSA)*

1. INTRODUCTION

In 1996 the specialists from IBM-company use the "**electronic business**" concept as the sense, that they put into it initially, is connected with "*the transformation of basic business processes by means of Internet technologies*" [2]. One of the most main preconditions for developing the electronic business is the utilization of computer networks (Intranet and Extranet) regarding internal and external interactions about the enterprise. The fast development of Internet-networks and its popular spreading have essential influence on many spheres of human activity. Particular authors in the literature determine the Internet epoch as a world social revolution, whose result is transformation of market economics into "**network economics**". Through existing technologies and new principles of work, the Internet-network is distinguished essentially from the remaining media as each user of information can be reduced into a deliverer of opposite information. This challenge imposes the transformation of Internet as a part of the information system about a large number of enterprises. There is a close connection between the Internet-network and the business, which is expressed in its utilization about **electronic trade** /e-trade/. The evolution at computers imposes the differentiation of a new subsystem, i.e. "digital distribution" in the system of the total distribution [1]. The improvement of computer systems, the electronic devices and the organized information are preconditions for raising the level of attendance of users at the time of purchasing of goods and services.

2. ELECTRONIC BUSINESS AND/OR ELECTRONIC TRADE

Because of the lack of clear and exact determination about the electronic business and the electronic trade still, there are different points of view in the literature. **The electronic business** comprises all aspects of business, which is accomplished by means of the availability of up-to-date electronic means. It includes a great number of processes as follows: accepting, forming and performing the order of customers, advertising, marketing, management of sales, interrelations with the manufacture, human resources, finances, management of risk, etc. Consequently, the main attention at electronic business is paid towards **the internal processes of enterprises**. It means, that the electronic business is more scaled phenomenon than the electronic trade and for its realization considerable expenditures and reorganizations in the information system of enterprise are needed. The basic aspects of electronic business are connected with the following things:

- interrelations with the users – by means of the application of Internet-technologies it is worked for improving the relations with customers. At this aspect, the factors have to be accounted for as follows: *personalization* of the customers /different data about their matters of taste and preferences/; preferences of the customers are about *complex decisions* at the time of purchasing of goods and services; from all enterprises in the electronic business, the *share of retail trade* is around 20%, which is a small segment to a great extent;
- interrelations with the deliverers – with regard to the fast and flexible reaction of the user's interest, the electronic business requires up-to-date methods for supplying of the enterprise;
- interrelations with the staff of enterprise – the organized information system is an index about effective work including all sections and it is directly connected with interaction between the customers and the deliverers. Although these interrelations are an important part of electronic business, in the reality very frequently they are underestimate which troubles the efficient work and leads to making of conflict situations.

From the point of view of the methodology, **the electronic trade** is only one of aspects of the electronic business. Even if it is the most essential aspect, the electronic trade does not exhaust the content of electronic business. In the practice, the following conceptions exist:
- a difference between electronic business and electronic trade is not made. Since it is accepted that the two terms are established into on-line-business during utilization of computer systems and Internet;
- the electronic trade includes deals, at which are transferred rights of property over a real product or virtual one;
- towards the electronic trade term, each efficient transaction can be referred which is accomplished by means of computer network and Internet.

Since the electronic trade comprises the sales of goods and services, organized via the network, it is referred to **the external processes about enterprise**, i.e. interrelations with customers, business partners and deliverers.

3. CHALLENGES OF ELECTRONIC TRADE

3.1. Advantages of e-trade

The dealers by means of Internet basically rely on users which have already been accomplished orders and are pleased by the service. According to Deloitte&Touche these users are around 42% in USA and they are mainly in the age limit between 24 and 35 years. The most frequently the users of e-trade buy books, compactdiscs, video films [3]. However, the e-trade of perfumes about some marks as Yves Saint Laurent and L'Oreal is forbidden with a court order. Thus, the creators hope to "*store the uniqueness of their products*" [6].
In comparison with the traditional trade, the electronic trade possesses a great number of essential advantages as follows:
- the personal service of customers is accomplished;
- new opportunities for marketing and advertising are submitted;
- the necessity from support of storehouses and shops drops out;
- the expenditures for advertising and service of customers are decreased;
- new directions of business are formed.

3.2. Disadvantages of e-trade

According to data from BizRate study [6] three fourths of Internet-users start but they do not finish their shopping in the network. Some of reasons because of that the people do not buy through the network are:
- non-satisfaction from the high prices about a delivery of purchase, which usually the user learns at the end of order;
- one fourths of the goods purchased on-line have not been reached to the customers;
- non-realized orders because of the problems with the web-site;
- lack of sufficient patience from the direction of users to pass through all slowly loading pages;
- four of the each fifth users is displeased by the design of web-site and the troubles connected with it;
- around 52% of the users do not finish the started thing, because of too many data that are required by them.

The questions, that are of great significance about users, are these ones connected with the reliability and the identification of website as well the safety of customer when the person submits his/her personal data and the number of his/her credit card. During performance of e-trade it is important for the customers the guarantee about the good quality, which cannot be check preliminarily as well the opportunity for an eventual return of the good in case of it is not responded to the notion of customer.
The decision of a part of these disadvantages at shopping through e-trade can be found also in the same network, since there are web-sites which take care of the catching of electronic swindlers and give information by means of which the customers can protect themselves. These sites are, e.g. **www.bbbonline.org**,

www.webassured.com, as well the user sites, e.g. www.bizrate.com, www.gomez.com, www.ratingwonders.com, which contain data about the quality, the prices and the proposing of goods as the users have the chance to compare the circumstance between different e-tradesmen.

4. APPLICATION OF COMPUTER SYSTEMS FOR RAISING THE ATTENDANCE LEVEL OF USERS

In spite of the existing problems in the network a greater part of users, in order to save time and expenditures for studying, utilize the submitted organized information at satisfaction of their needs. In confirmation of the theoretical statement the authors of this paper afford to the circles two real examples from Germany, through which they illustrate the application of computer systems as regards better attendance of users at purchasing of goods and services. These examples reveal the tendencies of development at the retail trade in the next ten years.

4.1. The German railways

Towards the information about travelling along the German railway now in Internet it can be traced a route for passengers with a car. The last news are the easy discovery of purpose by means of 50000 "*Points of interests*". In these 50000 "Points of interests" which comprise bigger towns in Germany are included as follows: municipalities, churches, universities, theatres and sights. It is not necessary already the address of Brandenburg's gate in order to find the best route up to there. Since many customers of the German railway wish to compare the time and the expenditures about travelling between the railway transport with these ones concerning the automobile transport, this imposes the extending of information about the German railways in Internet with routes also for the automobiles. Everybody, who seeks a link at the time of his/her travelling can also utilize an option for achieving his/her purpose by means of an automobile, e.g. remoteness, description of road, timetable of routes, expenditures, etc. The option can also be used by walkers and bicyclists.
For example, the user from the University of Koeln wishes to travel about a congress in Berlin from 4th to 6th December 2008. Through on-line information www.bahn.de he/she can reserve not only a hotel in Berlin, a rented car, tickets for a show, but he/she can also check all opportunities for the travelling as follows:

- **travelling with railway transport**: the information in Internet recognized the initial point "Koeln, University" and the final purpose "Berlin, International congress", i.e. two from 50000th "Points of interests". The results from a review are: "the travelling with railway transport and public town transport will continue exactly five hours". Where and when the person must change the tram is also indicated as well the price for travelling with railway transport. The user will pay as an owner of card for railway transport with inter-city train a two-way ticket "Koeln-Berlin-Koeln" 95 euro. The ticket and the reserved seat can be booked on-line immediately.
- **travelling with automobile**: through "option" button it can be chosen the function for description of the route and the map. The result is: 565 km remoteness, time of travelling over five hours, expenditures for going and return by car 390 euro /at 0.69 euro per km according to ADAC-table/.
- **travelling with airplane**: the user can choose the page of German railways and press "Reservations and purchasing" as well as on the next page the person can press "flights" The result from inquiry about the price of flight is: the most favourable ticket costs 305.25 euro and can also be reserved on-line.

After that the user is studied the information the only thing which the person must do from a position of potential customer of the service, namely transport, is to make a decision about the type of transport means which satisfy his/her wish for travelling to the highest degree.

4.2. "Supermarket of the future" /Future Store/

In Rheinberg (Duisburg) from the end of April 2003 the first supermarket works with intelligent trolleys and mugs, instruction for purchases and cash-automatic devices.
At first sight the special shop in Rheinberg looks like fully normal supermarket. Instead of speaking with the shop-keepers, the customers communicate with a computer. It is called "**PSA**" /Personal Shopping Assistant/ - personal consultant during purchases and there is a screen attached towards the handle of trolley. This PSA accompanies the customer through the whole area, i.e. 3800 m^2, of the future supermarket. PSA is one of the news through which the attendance of users is raised [4]. The boring search of different assortment groups is removed /e.g. macaroni products, pizzas, soap powders, etc./. A search-body is operated at one touching of the monitor. The name of product is written and it is appeared on the screen, e.g. soap powder, row 27. The digital plan of supermarket shows where is the 27th row. There is a list with special suggestions towards this information, e.g. soap powder about woollen clothes. Before putting the container with soap powder in the trolley, the price must be scanned on the reading device. The monitor displays which product at what price is

purchased. As a result the new total sum is always appeared. This is one of the advantages about the customer to know at all times of purchase what sum he/she must pay at the end.
The conception is developed only for ten months as together with this one, the supermarket is rebuilt and fifty new employees are appointed with part-time employment. At the latest up to 2013 the future supermarket must become a standard in the whole country.
The electronic signs with prices on the mugs also belong to the news. The employees set centrally the price in one computer, but from there messages towards the mugs and the cash-boxes are sent out. In this way the prices are not wrong. The intelligent mugs inform in the store house when they are empty. The goods "hit alarm" when the date of suitability expires. This possibility is accomplished by means of microchips and transmitters in the labels. They send signals also in case that the goods are stolen. There are also information terminals everywhere. On one of them through hatching code of wine bottle, the following information can be obtained by the computer: from what region is the grapes, what is its taste, types of recipes which can be printed.
Facilitations exist at the cash-boxes, i.e. it is not necessary the purchases to be arranged already on the conveyor belt since PSA has transferred all prices of products directly at cash-devices. The payment can be performed by means of Payback-card as the bill is subtracted directly from the bank account of customer.
"*At the beginning of PSA introduction – the system has certain fear of lay-off, but 124th employees are enthusiastic over the future supermarket, the spirits of team is super, but about the customers it is pleasure*", recount the manager Josef Zaidi [4].
The news attract the customers from Munich, even from Netherlands. Sometimes the problems are appeared at double scanning of products but this is eleminated easily with deletion of data.

5. CONCLUSION

From performed analysis over the advantages and disadvantages of e-trade and the application of computer systems for raising the level of attendance of users, the following **conclusions** can be formulated:

1. The popularity of global network and the availability of Internet in the daily work of large commercial firms are connected with optimism about the future application of computers in the retail trade.
2. The preparation and the presentation of processed information are a key stone for successful electronic trade.
3. The presentation of tables, graphics and verbal statements, which are referred to a description of the goods and the services, must facilitate the users at their choice to the highest degree.
4. The computer systems are changed continuously as well as they are a precondition for developing the e-trade and for raising the attendance level of users.

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COMMUNICATION ASPECTS OF E-BUSINESS SYSTEMS

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Summary: In order to be successful, web-based electronic business systems have to be developed in such a way that both the customers' needs and the business intentions of the provider are met. As human-to-human interaction is partly replaced by human-computer interaction in such systems, this requires anticipating the users' behaviour and paying a lot of attention to the communication aspects.

Keywords: communication, e-business, success factors, user profile, story boarding

1. INTRODUCTION

Web-based electronic business systems are developed to improve and extend a company's business. Some of the expectations are cost reduction, attracting new customers, and opening new business channels. Such expectations can only be met if the system is accepted by a large range of various users. Acceptance and use by customers is also important in that some customers dissatisfied by the offered system might be lost to the business, as they are expected to be able to find an alternative that suits them better. As human-to-human interaction is partly replaced by human-computer interaction in such systems, this requires anticipating the users' behaviour and paying a lot of attention to the communication aspects.
The analysis showed that those factors that have the greatest impact on an organisation's successful Internet use are more strongly related to the human factors rather than the technical aspects. A closer examination revealed that they were in fact more specifically concerned with communication and customer service. This implies that for an organisation the communication aspects of web-based electronic business systems are key for the systems' success.

2. COMMUNICATION ANALYSIS

Story boarding – despite its formal foundations – provides a rather nontechnical approach to usage modelling in electronic business systems. In fact, it remains on a level of abstraction that is much more linked to the application than to the technical means of its realisation. Nevertheless, a story board specifies, how a customer will communicate with an anticipated system. This does not include an answer to the question, why this communication is the best for the business and the customer.
However, if a customer can get the impression that guidance and information are as good as would be expected from a human, the system will more likely be accepted and thus be successful. From this we draw the conclusion that the story board has to be defined in a way that best reflects the customer-business communication in case there were no systemsupport. Therefore, our method suggests to start with an analysis of this communication as an input for story boarding. Communication analysis summarises the activities and techniques that are applied to understand the typical human-to-human interaction in the application domain.
Communication analysis addresses typical human-tohuman interaction in the application domain and classifies typical communication barriers. Following Hirschheim et al. (1995) information systems usage is based on the exchange of linguistic expressions and can be understood as a technically mediated message exchange. Therefore, the analysis of human communication can be applied to information system usage. It is used certain

dimensions of understanding messages as a framework for understanding communication. These are used to identify communication flaws.

3. COMMUNICATION DIMENSIONS

We may understand communication as an exchange of messages (Cragan and Shields 1998). In the present work we deal with semantic and pragmatic aspects of these messages. In particular, we are concerned with successful communication, i.e. communication by means of which both partners do meet their respective goals. According to (von Thun 2000, pp.23-35) we distinguish four main dimensions of understanding messages:
– Content, i.e. what the message is about;
– Presentation, i.e. what the speaker tells about the message and the sender;
– Relationship, i.e. what the speaker thinks about the receiver and their relationship;
– Appeal, i.e. what the speaker wants the receiver to do.
Similarly, Dwyer (1993) classifies the elements in the communication process: sender, message, receiver, feedback, channel, context/setting, noise/interference. These dimensions apply to talking, i.e., spoken messages. In information system usage we mainly have to deal with written messages. We believe that these dimensions of method understanding also apply to written messages.
We use them as a simple message meta model and suppose that a necessary condition of non-successful communication is that at least one message is flawed with respect to one of the dimensions. Therefore, we distinguish the following message flaws:
– Content flaw, i.e. the sender does not say what s/he wanted to say, or the receiver understands the utterance differently;
– Presentation flaw, i.e. what the sender tells about him/herself is inaccurate, or the receiver understands it incorrectly;
– Relationship flaw, i.e. what the sender thinks about his/her relationship to the receiver is incorrect, or the receiver understands it incorrectly;
– Appeal flaw, i.e. what the sender wants the receiver to do is not persuasive, or the receiver does not correctly understand the (valid) appeal issued by the sender.

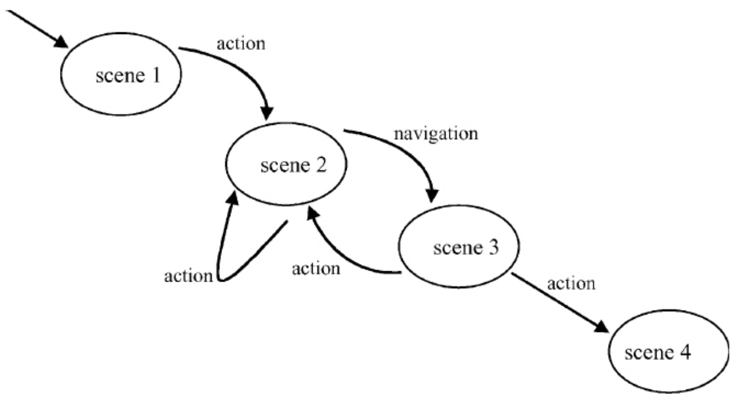

Figure 1. Communication aspects

On the figure 1 is shown emphasis of the communication aspects for the successful development. Clearly the above mentioned dimensions of message understanding are not really independent in a formal sense and neither are the flaws. But as can be seen below, they help to formulate and classify communication barriers that appear to be realistic.

4. COMMUNICATION BARRIERS

The transition from human-to-human interaction to human-computer interactions can be thwarted by a number of barriers. For instance, transactions that were traditionally performed over the counter in a branch of the bank were aided by face-to-face communication using voice intonation, questions and answers in real time, feedback loops, eye contact and awareness of non-verbal communication such as pointing to computer screens or printed material for records.

Online transactions are significantly lacking in verbal indicators and query possibilities. A common expectation of users is that human-computer interactions will be more efficient than traditional ones due to faster response times and fewer delays, less time spent on turn-taking or politeness strategies, a higher level of accuracy achieved and multiple queries or tasks performed within the one service encounter.
There are four types of communication barriers: content, navigation, presentation and technical. Content type barriers may consist of actual or potential users being overwhelmed by information overload. Information underload, another content type barrier, consists of insufficient data provision and results in users being unable to solve their problems. Both of these can be stressful and lead to service delivery being perceived as unsuccessful.
Navigation type barriers can be attributed to three main causes. Users may not know where they are located in the Web information systems' information space, how to reach a desired location within this space, or what functionality is required and where it is located. Presentation type barriers may include poor choice of colour scheme, cluttered layout such as too much information on a page, lack of white space, too small font size, inappropriate typeface and no order to the links offered.
Technical type barriers include barriers that interfere with service delivery including non-recognition of user names and passwords, systems being ''down'' or out of service and lack of integration with the ledger and other accounting systems. Users may also be excluded from communication due to them using the wrong vendor's browser or a version of a recognised browser, which is considered to be too old.

5. IMPROVING COMMUNICATION

Communication can be improved through localisation abstraction and through metaphors. Localisation abstraction addresses problems arising from content, presentation and relationship flaws. As the communication we are dealing with here is a mediated human-to-human interaction, various kinds of knowledge and ability have been represented inside the web information system as data or program. The information system in response to a customer's inquiry chooses the data or program best suited.
This requires having a model of the customer (type) represented inside the web application. Given a particular inquiry and a customer type, the most suited data or functionality available may be selected or constructed and the customer given access to it. The web information system further obtains an answer to the inquiry that can be just the identified data as it is stored in its database. The simplification of choice is realised by supporting tools. At least the following navigation functions appear worth supporting with tools:
– Position signalling, a function pointing out to the user his or her actual position in application space.
– Heading determination, a function determining the direction and also maybe the means best suited to approach a certain position.
– Short distance environment exploration, a function used to explore the immediate neighbourhood of a given location.
– Long distance environment exploration, a function used to explore the regions of the application space that are far away from a given location.
Metaphors address problems arising from relationship and appeal flaws. Properly applied, metaphors can simplify the task of communicating complex ideas, create interesting relationships and result in enthusiastic customers (Thalheim 2000). It may be the case that no engineering procedure can be constructed leading to usable metaphors in a sufficiently high degree of cases. Therefore it is important to design applications that exploit the use of metaphors such that these can be easily built in after deployment and are maintainable. Supposing such design is found and implemented then by means of prototyping and perfective maintenance more suitable metaphors, or indeed metaphors at all, may be found and incorporated into the web information system. Such design needs to take into account that in computer applications language may occur in the following roles:
– the tool language, i.e. the language role in which the user interface signals the customer the semantics of its functionality;
– the business language, i.e. the language role used in the universe of discourse (UoD) to identify problems, their solutions and quality criteria of all of them;
– the metaphor language, i.e., the language role which helps the customer understand the state of affairs in the UoD and what interface functions can be used to achieve his or her goals.

6. CONCLUSION

In this paper we addressed some of the communication aspects in the development of electronic business systems. Communication and collaboration are the critical success factors when building a successful knowledge enterprise (Raisch, 2001). Building an open communication climate between employees, customers and partners is important. One way of achieving this is via an organisation's web site that serves as a communication channel. Reducing barriers whether content, navigation, presentation or technical must be a high priority goal. The main implication from the case study research and background knowledge on information systems is that design methodologies for web information systems should start with the human factors rather than the technical issues. Another promising line of future research concerns a tightening of the links between communication and linguistic analysis with story boarding. In particular, we will need more detailed guidelines on how to combine techniques to audit and review communication strategies with story boarding. It is also desirable to provide algorithms that automatically set up first rough story boards based on the results of the communication and linguistic analysis.

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EMPLOYERS TECHNIQUE OF CONTINUOUS LEARNING AND TRAINING

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Summary: *Market requests and great concurrency, brings today a new challenge for all organizations, and thereby for all employments. Many of managers and manage teams suppose that is management skills, process of continuous learning and development, very significant strategic approach. i.e. essential segment of successful business politic. Because of that, modern organizations, must to pay attention especially on "continuous learning process", because they confront, and would be more confront in the future, with increase concurrency and other challenges on market. Because of that, it becomes one of very actually questions in modern economy, where it shows that "Each company must become "a learning organization" [11]. Hence, it is necessary to have a development vision of determined organization which would be with one part project and across maintain nurture to employments in the goal of their further develop - by organization of workshops, trainings and knowledge transfer, like ordinary trends tracing and technological accomplishment in that range in the world. This approach is very accepted in development countries, but more and more it accomplishes and in the transition countries, so and these in the development. One of the reasons more often appliance of this approach n our country, is more numerous presence of multi national corporations and other foreign companies. Because of that we support initiative and practice of development our companies, whose follow these world trends and investigate more in staff development, i.e. human ' resources, like main factor for business success accomplishment.*

Key words: *learning process, management skills, business coaching, learning organization*

1. INTRODUCTION

With response on challenges of economic surrounding, companies invest maximum effort to be in consonance with world's technically-technological accomplishments, with appliance of modern standards agreeable with necessities, with goal continuous accomplishment of management skills that it would to accomplish business results, i.e. advantage refers on own concurrent.

In that direction, activities are directing according to appliance corporative management principles, with motivation of employments ant their permanent improving. Modern conditions request that employment developed management and adaptation skills on particular and very changeable market, what means acceleration development and optimization human resources - skills and continuous convergences of new knowledge.

Of course, that it would be accomplish success in this range, it is necessary define, the first, standards and methods which will accomplish that organization i.e. companies, brings adequate decision about strategies staff development - what includes a choice kind of training, seminars, workshops, and other forms of accomplishment, which need to be accept and organize. During bringing of these decisions, it shown in practice, that is important that these suggests comes and from "below", that to say, smaller organization complex managers, own suggests give because they know better abilities and possibilities theirs employments and which direction it is necessary to accomplish further.

With that it initiates and hurries opened discussion about further development directions determinate organization, and managers on all levels make responsibility for its development. This develops ability of faster adaptation on constant changes in market and total business environment.

Before of all, it is neccessary to know that "The process of assessing company's capacity and productivity risks by location, business unit, and job category can reveal some daunting challenges--say, a serious shortage of talent in an area targeted for growth. The key is to identify such a problem far enough in advance to be able to address it and, in doing so, gain an advantage over your competitors" [4].

2. THE FORMS OF VARIOUS LEARNING AND IMPROVING SKILLS IN MANAGEMENT

Competent activity and continuous of employment education is approach which is very accept in developed world, in which it is value knowledge, competence, activity and responsibility.
Today becomes various forms of activity, in where is training programs, which offers management and planning with main factor for accomplishment successful business activity of each organization, i.e. company, and that is management of *human* resources.
Mostly of training programs are from various management ranges, which are accomplishment with modern techniques and ways of modern business, i.e. they support business ambient in which and managers' active engage in learning process. They are and main carrier and actuator of these activities which motivate employment in organizations that to accomplish skills and converge new knowledge.
Training programs are designed and adapted to necessity of employments in given organization, where are include business ethic, solution of between human relationship, especially technique and skills in marketing, wished forms of communication, negotiation process, learning team-work, methodology business plan making and adequate business documentation. The range of business finance, efficiency makes decisions with especially refers on leadership in business and similar, are training modules whose, also include in this kind of programs.

3. PRACTICE WHICH IS ACCOMPLISHES IN THE WORLD

It was show, in the practice, that companies which are much more invest in professional development their employments, accomplish better business results.
Many of theoretic consider that it is structural part of strategic management and they accent maintenance accomplishment each organizations how with long-term goals, so and each changes in business surrounding. In that context it is accentuate that: "To operate effectively, organizations need to 'fit' or align themselves with their environment, strategies, capabilities and leadership skills. To compete successfully in a highly competitive and constantly changing business environment, however, organizations also need to attain 'fitness' – the capacity to learn and change to fit new circumstances. The concepts of fit and alignment are not new in business literature, yet the record of change – the many failed initiatives most organizations embark on in an attempt to improve their performance – suggests that many managers do not know how to lead systemic and fundamental change. By employing quick, superficial change programs leaders skillfully avoid learning the truth about poor coordination across vital activities in the value chain and the fundamental organization design, cultural and leadership issues that are blocking organizational effectiveness" [8].
And cited authors affirm that not only significance of continuous learning, already especially and - rise of quality of organization in that range, which accomplishes that fast and successful accommodate to changes and new occasions in business surrounding is from great importance.
human human resource policy) which hurry motivation of employments for continuous and competent accomplishment, like very important element, and usually with participation on conferences and other forms competent meetings, participation on seminars, training programs and other, depend on business activity determined organization.
Staff necessity planning and making human resources development plan, structure of qualifications, like important success factor of one organization, and identification necessity for constant professional accomplishment and development, in consonance with business orientation, are important aspects of these politics.
Behind offer determined programs, becomes and consultant services which are available to all employers who wish to accomplish successful carrier, with staff directing goal and proffer maximum support to own employments.
The first training new-employ attend is, in many cases, is presentation with organization activity, i.e. company, and detailed presentation of business activity. Main principle is that each new-employ individual, right on beginning must to meet with work and organization goal, in which it will be employ.
Behind of that, they are stimulating that regularly attend and finished training programs which accomplish to them staff develop and accomplishment of new knowledge. Today, mainly, is in use modern technique and ways, like as interactive training and creative workshops, designed according to necessity and client requests, i.e. necessity of employers in determine organization, where it is allude active participation all participants, use active learning methods, across study of events and other methods which is appliances.
The learning and knowledge acquirement organization approach mainly depends on manager's understanding, support and behaviour which are on master's positions. Today exist define methods and ways, which maintain possibility to check level of functioning of one company as "learning organization" [11]. The complete interactive version, available at los.hbs.edu, includes all the self-assessment statements to the right; they are divided into three sections, each representing one building block of the learning organization.

It is very important to accentuate those managers on master places need to initiate dialog about new ideas and innovations, in creating of modern management skills and acquirement and changes of knowledge between employments, with motivation to making adequate business ambient in organizations, by usher "continuous learning" principle.
With all of this, it is necessary to determine and directives of organization development in that area, with concrete suggests defined, conditions and methodology to accomplish that. The goal is define and realize adequate strategic politics which would be accomplish that "eventually weakness" in business, be exceed, with maintain these kinds of training programs and other forms accomplishment of employers.
One of coaching, a kind of training programs, which is accept in many of organizations, i.e. companies, is and "business coaching."

4. BUSINESS COACHING

There are many of kind training which are in use in development countries, and which bring excellent results. Among other things, that is different kind of coaching, among which is and "business coaching", which became very popular, especially after foundation International Coach Federation, at the beginning 1990th.
It is designed like one new method and form of training, which inspires actors that with own abilities achieve to results and with that obtain assumption, depends on exclusive self-might.
Methods of these training principally are "succeed" in sport sphere (coach who helps tennis player to win trophy or football coach who leads football team, and similarly). It is very extensive and has wide implementation.
It is applying to organizations, employments and individuality who wants to accomplish success, like and persons whose wishes to self-beginning own business. We differentiate more kind of coaching, among which are personal coaching or self-coaching, business coaching, and executive coaching (for leaders) and others.
This can be and one new profession, on which they can to pay attention especially management students, and similar directions, which would be after competitive nurture (coach training) can to maintain services to interest one's, who want in the various management area to be develop, or maybe to start or developed own business.
Business coaching covers today a wide palette in all areas human's resources (staff management). Some of these coaching programs directly are focus on accomplishment especial skills, like as marketing plan or business plan preparing, making business reports, teamwork, and job delegated, networking, etc.
On the other side, coaching can to helps at personal development. Hence, business coaching is focusing primarily on business, and can helps to individual to improve own performance in private business or companies where they work.[1]
The reliance of modern methods and techniques accomplish to training actors to recognize self-possibility alone, maximize own potentials and acquire assumption towards business success accomplishment. *Training modules* which are engaged in this program involve the most significant segments of business, like as making business plan, entrance on the new markets, and use of new technologies, negotiation skills, leadership, and other.
Alone process of coaching realizes across partnership between coach and participant in very thinking, stimulation and creative process which inspirited them to maximize its personal and professional potentials. That is continuous relation who is focusing on participants who want to realize themselves visions, abilities and business goals.
Coaching is used like process for personality discovering potentials with which every individual dispose. Coaching process helps to participant to define and achieve professional and personal goals to faster and easier way than that would be possible [12]. This kind of training promotes individuality at each participants, engaged in the management and business, as and area strategic and operative planning. With those, participants are motivating that ordinary check own performance in relation on positioned goals. They stimulated to self-abilities maximizes own potentials and in the shortest possible term accomplish business success.Coach, must to be confidential partner, motivator by a part, good listener, like and excellent expert all ranges of management. Behind of that, it needs to discover main obstructions with which participant confront and direct it on the way toward searching the best solution. This training program manages personally development; impel initiative, creativity, and leadership which are starting base for accomplishment a business goal. Many of participants are not enough motivated, or they haven't enough assumption, that they bring adequate decision in determine period, which are from strategic importance for their further professional development, was that means on employments in organizations, or them whose want to found own firm.
Base of coaching process is - makes solid contract on beginning, with which would coach and participant, obligate that work together and across that contract accomplish positioned goals. After passing period determined by contract, it approaches to results testing, and in intermission it follows development and analyze

[1] Coaching: A powerful catalyst for transformation performance, Charles Woodruffe, Managing Director, Human Assets Limited, London, UK; *Training and Management Developmental Methods,* 2006, 20, 2, strana 401

is it going in wanted direction, and if it is not accomplishing what is planning, it is employs additional training that would be accomplish wanted goal.
Certainly, if the participant is not enough ready, motivate and it not comply action plan maintained with coach, the results will not come. That is one of mean limitations of this way of training, and to all participants that would be clear adduce, at the beginning.
Successful reflects in the performance of person or one organization.

5. BUSINESS ENVIRONMENT WHICH SUPPORT LEARNING PROCESS

In busines promotion goal, by the way of education activities - world companies tends to maximum employment all resources, accomplishing "economy of scale", in increasing quality extend products and services, followed by modern trends and market requests.
Business environment gives possibility faster way of management and functioning in the organizations. Modern aspect information technology and other technologic accomplishments, which are applying in management today, bring and to those managers meet new challenges. In the goal term respecting it is difficult to adjust everything during accomplishment all engagement process. In those situations it is difficult analyzing problems and solving them on adequate way.
Business environment which supports learning process, ensure detailed recognize of organization process.
Managers on leading positions can to hurry this kind of business environment, i.e. to support learning process, especially by motivation of employments, where apply modern methods management knowledge and technique. They created too making successful teams, in whose all of their particles, which dispose adequate knowledge and skills, contribute accomplish assigned business goals, and with that and business success.
There are two main ways to recognize necessities of one organization, i.e. company - in which direction is necessity to develop determined skills: analyze on individual level or on one business unit level, or project team, i.e. in wider volume, depend on organization size.
In that means is important that especially pay attention on "good and worst sides", i.e. that organization direct to long-term learning process and adjustment to visions and strategic development plan determined organization.

6. CONCLUSION

The necessity for continuous education and accomplishes of new knowledge appears in all sectors of economy and society, like and all organization or company levels. Today it is necessary to initiate with basic principles of knowledge management, continuous learning process, and tends in "learning organization" development. This is especial attention refer on more accepted approach to learning culture attending, stimulating and motivation employment in that direction, like and ensuring economy profitability of learning. To this need to add - all developer system information technology can be from great help in the management-learning appliance.
Many of scientist research in last two decennia, affirms rarely importance of becoming adequate business ambient, which support permanent learning process and accomplishment of skills in management sphere. Namely, managers would be to give maximum support in that process recognize "good and worse sides" of own organization, necessity of employments, because that enable and adequate choice determined programs, methods and capitals, because of accomplishment more dynamic development in the business environment.
One of basically postulate is accepting this concept by side of all employments. Management of knowledge is base for maximization business results, which would need to accomplish on very systematic way. Converged knowledge and experiences can be exchange between individual, groups or similar organizations. Of coarse, before of that must to accomplish adequate module and way of functioning, with presence obligation increasing mind level between employment for continuous education and accomplishing of knowledge, like one of postulate that individual accomplishes successful professional career, i.e. that organization accomplishes much better business results.

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CAPITATION AS TECHNOLOGY OF MANAGEMENT IN HUMAN RESOURCES MANAGEMENT IN HEALTH

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Summary: *Under capitation we consider paying mechanism where doctor or health institution get in advance fixed amount of means for the defined period of time (monthly, trimester, yearly) for each patient registered with that doctor or health institution so that all planned health services could be supplied (on primary, secondary or tertiary level). The amount of money supplied id defined in advance and does not depend on which services were performed during the time. With this way of payment doctor or a health institution bear a considerable risk, a health institution itself becomes a kind of a small health insurance. The capitation amount is defined by expected costs of performed health protection. The amount of money in capitation can be fixed or "adjusted to risk". Enlarged fixed amount refers to sex, age, chronic diseases or social status. In the system of primary health protection in the Republic of Serbia a decision has been made of gradual transfer from financing by the number of employed and their collective contract to payment by registered patients per each employee. In that way a levelling when those who work get the same salaries as those who do not, or work less will be decreased, and existing human resources will be better used.*

Key words: *capitation, human resources management*

1. BASIC CHARACTERISTICS OF CAPITATION MECHANISM

With capitation as predominant mechanism of payment we can talk about three basic models:
1. All the services are paid by capitation;
2. A part of the price of each service is paid through compensation defined by capitation, and a part of the price of each service is paid by service compensation;
3. Most of the services are paid by capitation but some of them which are especially stimulated (preventive services) are paid separately.

Experiences of many countries show that expenses of primary health protection services are decreased by applying capitation as a dominant way of payment. Capitation in these cases represents an instrument of expense decrease, through enabling stimulation to health service providers to provide services in as efficient way as possible[1]. Of course we should bear in mind the following parameters of enabling quality service in health protection as: Approach – geographic availability, waiting time, working hours, transport, equality, possibility of equal approach for equal needs, regardless race, cultural or social factors, equilibrium with needs – over availability, insufficient services, social acceptability, whether the way of service performance is acceptable for the population aimed, efficacy – whether the service is offered as efficient as possible, bearing in mind available resources, and in the end effectivity – whether offered services contribute to the population's health?

2. PRO I CONTRA CAPITATION

There is expressive concern in many countries that capitation payment in a large scale is not connected with enabling high quality health services. That is why many countries introduce different indicators by which they

[1] Project "Building capacities of Republic Office for Health Insurance in Serbia" financed dy European Union through European Reconstruction Agency

try to value health services in other ways which are offered in primary health service. Ways of paying doctors, mostly in all the countries represent mixture of earlier mentioned systems. Some doctor activities are easy to define and control and for those activities it is justifiable to apply way of payment per service.
On the other hand some activities are much harder to define. There are some activities which we should support and this refers to a role of prevention in primary health protection. This is easily achieved by introducing capitation with some activities paid by service (immunization, small surgery...)
Experiences of some countries show that the best way to pay primary health protection is mixed model and combination capitation with payment by compensation for services with regular combination of different elements which should provide regular stimulation of health service providers in order to enable health service in most rational and the highest quality way.

3. MONTENEGRO EXAMPLE

In the Project of improving health protection system in Montenegro a "Methodology of capitation defining and prices of health services in pilot project in primary health protection" was developed. The basis of the Methodology lies in the way of payment of chosen doctors in a way that a part of the service price is paid through capitation and the other part through payment by compensation for the service with limited maximal amount of means to be invoiced. In this way good sides of capitation are combined with payment for service, so, this is the mixed system which was marked as the best.
Simple capitation would assume that means are divided only based on the number of registered patients. Nevertheless, as the need for health protection is not the same with all the citizens, and depends on their age, there are coefficients introduced, for certain citizen groups depending on age structure, which have an aim to state expected need for health protection of certain citizen groups. We have here coefficients for seven age groups as follows:

For persons aged to 1 year - coefficient 3, 00 - **- group 1**;
For persons aged from 1 to 7 years - coefficient 1, 90 - **- group 2**;
For persons aged from 7 to 19 years - coefficient 0, 88 - **- group 3**;
For persons aged from 19 to 50 years - coefficient 0, 84 - **- group 4**;
For persons aged from 50 to 65 years - coefficient 1, 40 - **- group 5;**
For persons aged from 65 to 75 years - coefficient 02, 20 - **- group 6;**
For persons aged over 75 years - coefficient 3, 00 - **- group 7**;

Special coefficients are suggested for primary gynaecology health protection as follows:
For women aged from 13 – 20 years – coefficient 0, 20 – **group 11**
For women aged from 20 – 40 years – coefficient 0, 55 – **group 12**
For women aged from 40 – 65 years – coefficient 0, 25 – **group 13**
For women aged over 65 years – coefficient 0, 15 – **group 14**
Pregnant women – additional coefficient 2, 25 – **group 15**

Based on data from insured persons data base of Republic Fund for health insurance average coefficient per an insured person in Montenegro is **1, 17**. At the same time calculated average number of coefficients per an insured female person for primary health protection from gynaecology area on the Republic of Montenegro territory is **0,38**.
Elements of calculating values of chosen doctor teams are defined based on: values of brut income and other personal income of the chosen doctor team (given by average coefficients from collective contract in power, work price where average expresses of past work are calculated, readiness, night watches (on duty), and other personal income); current material expenses (where expenses of a doctor in a health institution are calculated, sanitary and laboratory materials, energents, amortization, expert improvement and other expenses defined upon analyses and calculations of expenditure in previous years).
As it will not happen that all insured, refugee and internally moved people to choose their doctors, value of a coefficient and point value will vary in comparison to the number of registered people so that all the money planned for primary health protection would be divided among health centres or chosen doctors. This means that average coefficient value and point value were calculated based on the assumption that all the people chose their doctors. This will make coefficient value and point value higher and that will influence average value of teams. This value will be received in time intervals which can be fixed monthly, quarterly, in half a year, or yearly, and which will coordinate with the intervals of invoice calculation in Health Insurance Republic Fund.

Dental care service and support centres will be paid by compensation for a service. This means that they will calculate invoices for the Health Insurance Republic Fund for each service they perform at a previously fixed price of the service given in points. At the same time a normative in points was defined which is a working obligation of the team.
Suggested work normative is 1610 effective working hours or 96000 effective working minutes a year. Complexity of work was also defined so that working normative for dental care teams and support centres could be fixed.
Thus, a minute of work of specialized doctor worths 0,25 points, general practitioner's minute worths 0,20 points, nurse's minute worths 0,13 points, and planned normative for general practitioner or a dentist in fixed to 19.320 points a year.
Apart from keeping a record health services which are given, minimal indicator set recording is planned, which should show basic indicators of given health service quality (as it is relation between first and repeated examinations, number of patients sent to other levels f health protection, etc.). Some of these indicators are:

1. Number of first examinations in relation with a number of registered insured persons;
2. Number of repeated examinations in relation with a number of registered insured persons;
3. Relation between first and repeated examinations;
4. Number of house visits in relation with a number of registered insured persons;
5. Number of recopies written in relation with a number of registered insured persons;
6. Number of orders for ampoule therapy in DZ in relation with a number of registered insured persons;
7. Number of doctor's orders for biochemical laboratories in relation with a number of registered insured persons;
8. Number of doctor's orders for PTG diagnostic (in DZ and outside) in relation with a number of registered insured persons;
9. Number of doctor's orders to UZ diagnostics (in DZ and outside) in relation with a number of registered insured persons;
10. Number of doctor's orders to consultative-expert examinations (in DZ and outside) in relation with a number of registered insured persons;
11. Number of doctor's orders for stationary treatment in relation with a number of registered insured persons.

4. THE REPUBLIC OF SERBIA CASE

The main quality initiative in Serbia is Book of regulations on indicators of permanent quality improvement of health protection. The need to introduce and possible effect of capitation were made on a sample of 25 Health centres included in the project: "Capitation Application Support in Primary Health Protection in Serbia". Evaluation was made by questionnaires and interviews during November and December of 2007, for purposes of assessment of subjective level of competence and skills of health workers in management, information technologies and finances. The question about seminar participation was also asked, suggestions for capacity improvement in the future were required, and attitudes on capitation system payment[2].
This research gave the following results: capitation in itself is not an aim, but means payment for a health centre not by the size of the building and number of employed but by the number of citizens gravitating towards the health centre.
Research showed that management wants to participate in the project and wants to accept this new system of payment. General attitude is that capitation will bring to payment which will be proportional to the quality of work done, and make the difference between diligent and lazy in financial sense. Nevertheless, some of the participants were worried concerning capitation acceptance from the employees; with annotation that management of changes and resistance to changes are very important for the transformation period that follows. It is also mentioned that there is a need for unique electronic system of data storage which will enable medical stuff (especially nurses) to increase amount of time devoted to patients and decrease amount of time spent for administrative work.
The attitude about capitation is an important aspect in training preparation. Positive attitude of team managers may significantly initiate training implementation while negative attitude may bring large difficulties. About half the participants in the study(52%) has positive attitude towards capitation, 2% negative, 48% think that they do

[2] Questionaries were formed upon a form for assessing capacity building which is used by School of Public Health in Belgrade, modified in accordance with project needs. The questionarie was sent to management teams (consisting of manager, financial manager, legal service manager, main nurse, general practice chief of stuff, pediatrics chief of stuff and gineacology chief of stuff) in 25 Health Centers. Out of 175 people to whom was this questionary delivered 164 filled it in and sent it back, which makes a high percentage of answered questionaries (93.7%).

not know enough about capitation to be able to form their opinion. This shows that a large number of participants have positive attitude and that there should not be significant difficulties with this part of the sample. Health protection systems are changing in all the countries. Modern and efficient health systems aim towards increasing patient satisfaction, to offer good care as they can, to improve system, organization, ways of giving services and human resources management.[3]

Ministry of Health of the Republic of Serbia defined in 2003. a primary health care vision of reform till 2015. In the meantime this vision is made law by regulations which are obligatory for all the participants in the system.

Primary health care vision of reform till 2015:

- Clearly define health care levels (ZZ – Health Protection) – primary, secondary, tertiary,
- Improve the role of primary ZZ as a “gate keeper” towards the higher levels of ZZ (enable that primary ZZ absorbs over 80% of all the services),
- Transfer primary ZZ focus from curative to preventive, of
- Enable even, equal, and just using of health services to all the users,
- Improve and define patient rights,
- Make responsibility decentralization for primary ZZ (including local communities, financing and decision making)
- Develop “market” models of primary ZZ financing
- Enable and regulate private sector participation in giving ZZ services,

In the last few decades in the whole world ways of financing health protection are being redefined searching for the best way which enables basic postulates of each reform. One of the changes is introducing a new way of primary health care financing through capitation. In that sense, by the Republic Law on Health Insurance (Article 146.) a question of chosen doctor in the areas of general practitioners, work medicine or paediatrics, gynaecology and dental care, is defined for a period of at least a year.

5. CONCLUSION

Because of the stated reasons stated above we state that mechanism of capitation may be a useful tool in achieving better allocation of human resource in health, which may finally make the largest possible difference between good doctors and others.

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PROCUREMENT IN THE ARMY OF SERBIA BY INFORMATION TECHNOLOGY MODEL

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***Summary**: The idea of the development and use of the Internet was first mentioned in the army. Internet was an experimental connection in the department of Defense in U.S. Army. Department of Defense was connected because it required training and development of communication networks, which may have survived the nuclear war. Internet as a means of commerce offers great opportunities for the Army to increase the efficiency and effectiveness of procurement in relation to the current traditional way of supply.*

***Key words**: procurement, Internet technologies, costs, military spending, defense logistics, information technology, defense expenditures*

1. INTRODUCTION

Internet enables faster data collection from different suppliers. It is necessary only on the Internet to find the presentation and offers from different companies that can offer the Army just what it needs. Army, as a major consumer of using the Internet opens the possibility to itself to make certain savings and redirect resources to other areas. Internet allows greater comfort in the supplying, and the possibility of substitution of products and suppliers, the establishment of a database and making faster decisions on stocks. Internet has no physical limitations that the archives, great encyclopedias, books, etc. do have.
In the field of Finance and Accounting, Internet can be used for electronic payment, writing and submission of views on the accounts of funds (foreign currency, local currency, etc..), The submission of multimedia reports, submission of reports to the shareholders, the signing of banking, financial and other arrangements.
Application of the Internet in the commands and facilities allows easier monitoring of human, material and financial resources. It is possible to establish the creation of appropriate database and submitting documents for command such as orders, orders, directives, instructions, different types of reports, etc..

2. APPLICATION OF INTERNET SUPPLY IN SERBIAN ARMY

The existing system of procurement in the army, opened the possibility of improving procedures and achieving greater economy. By standing on the side of the army, which already has in its procurement system usage of the Internet and e-business, and our supply system must keep pace with time. Such access to e-commerce is in favor of Army modernization. To do the procurement with high quality, in order to find the supplier, turned the proper quality and more things that are important in the acquisition, dispose of the inevitable with a large number of information. This is the only one of the advantages of the use of the Internet. Reduce the amount of received, used and archived paper and the achievement of greater efficiency and economy in business practice, should be the main motive for the improvement of procurement and the introduction of the Internet in their system. However, small financial resources, weak regulations and aspects of security and confidentiality of the information in the Army are the brakes for the introduction of the Internet as an instrument of supply.
The system of supply within the e-business is an adequate solution for the Army, so that it is a specific organization that can follow the development trends and keep up with the world.

To improve the procurement system in the Army based on the Internet, first it is necessary to provide the appropriate structure of information system (IS), and provide staff with the necessary knowledge in the field of e-business, and at the end to solve the problem of protection of information.

2.1. Human resources and staff development

People are the highest quality resource available to one organization. Economy personnel in the military organization is quite complex in comparison to the other (profit and non-profit) organizations. The reason for that are the specifics of the functioning of the military organization, as well as its size and complexity. In it there are a number of specialties, different educational levels (from the middle to high, of secondary military school to the highest military school), people of different age time, etc.. Army of Serbia must know what are the possibilities of its members, and what is the possibility of their adaptation when there are new challenges. First of all, starting from the issues of interpersonal relations, cooperation, the training and work development, organization and morale, organizational culture and the like. All these are factors that determine the human resource. Work in the supply system, primarily the search team work and “esprit de corps”, and also man-manager.
Criteria of hierarchical level contains the first line managers, middle level managers and top management.

Table 1: Relative importance of management skills at different hierarchical levels

Managers of the first line	Managers of the mid level	Top Managers
Conceptual	Conceptual	Conceptual
Human	Human	Human
Technical	Technical	Technical

Initiators of procurement managers should have the ability in the technical skills, ie. to direct and based on the creation of technical specifications and requirements that need to meet the product is obtained.
Middle-level managers, tactical plan-holders, should have equal affinity, in addition to human, and the technical and conceptual skills - character, then that is equally fun and technical specifications and concept which will be most used for a particular procurement, and to suggest paper, manager who makes a decision on procurement.
Top managers (top management) of a persons or person in USn decide that in fact the execution of procurement, should have the emphasis on conceptual skills - characteristics, to create the tender documentation and select the optimal method of procurement that will give results, and consider the legal framework and the needs of defense, the importance of procurement and all other elements.
Information function in terms of income and communication of information is the most important aspect of managerial work, as the information resource. Persons who perform procurement in the Army, must be informed about all relevant factors that may be of influence on supply, because only so can successfully, in a lawful and effective way to perform complex tasks in the procurement.

2.2. Financial resources

Provided financial assets in the defense budget, to the extent that meets the requirements for procurement in the qualitative and quantitative aspect is one of the conditions for the implementation of procurement under the Law on JN (Public Procurement).
For procurement, it is very important what kind of trace we left in a previous period of operations with suppliers. If we are bad "payers", it will be reflected on the implementation of the current contract and many of them will not be ended because of the unpaid obligations under previous contracts or deliveries of the contract. This often happened in practice, prior unpaid obligations caused the inability to continue the implementation of the contract, because it is on annual contracts with successive deliveries. Because of not realized contracts, security instruments are implemented, account blocked as well as the possibility of further work and business, reported as mutual claims. All this is not a recommendation to the next period or year, bidders-potential suppliers, rush to

tender for JN. However, the less they will report the (less reliable), as a way of business that we offer, delivery, and when it is paid, directly opposing the strategy of the manufacturer-retailer, or better said, the market strategy, new management techniques, new marketing strategies and alike.
Army, as a major buyer, has to recognize and analyze the strengths and weaknesses. Forces of the Army are in the fact a large consumer of goods and is going to pay. Weakness of the Army is that the payment is implemented with a delay and that's for such a situation does not match. We are all ready to be covered behind the fact that there is no regular inflow of funds, because of which we pay large amounts of interests and court costs by executive solutions. Bearing in mind that the annual contracts, with millions of values, those delays in payment is what large enterprises are difficult to take.

2.3. Privacy policy

Application of the Internet as a tool of supply in the Army is sensitive, with the aspect of protection of confidential information. Specifically, it is necessary to prevent those who are not authorized by the recipient and the sender, to gain insight into the sent data. The main danger is not an insight into the data of other people, but the possibility of their abuse. Data can be divided into four groups:

- public information - information that everyone has access to
- authorized data - data that everybody has access to, but they are protected from the exploitation of copyright.
- confidential information - information that is secret, but their existence is not.
- secret information - information that their existence is a secret.

Subject of protection must only be confidential and secret information, which are mostly used in the Army. To have the data protection carried out, many of methods and techniques are used. If the data is being transfered by some mean of communication then applied techniques that are a product of cryptography, the field of applied science in mathematics. If data is stored somewhere or received in a certain place, then they are insured by the means of personal identification, which means that they are only accessible to the people by whom these techniques were verified as authorized. For the protection of information system from the negative impact of the Internet are typically used border servers (firewalls). These are the methods used in modern business conditions of large business systems and companies.

2.4. The possibility of launch and implementation of procurement in electronic environment

The entire launch and implementation of procurement could have the following form, including the specific features and advantages of e-business:

- report to the procurement, the preparation, in electronic form sent to the applicant order over computer networks,
- order after consideration of papers makes a decision about the starting procedure, which regulates the conditions, the composition of the Commission and everything else that is necessary for successful implementation of procurement,
- call for tender is published on the Internet site,
- interested bidders meet the requirements of the contest on the site, make their bid, and submit it in electronic form, also via Internet,
- after the expiry of a deadline for receiving bids, the Commission may approach their jobs, review bids, creates a record and sends it to the orderer for review,
- orderer, after reviewing the record of the Commission, makes a decision about the selection of the winning bidder, and has the ability to ad the election results on the already known site,
- at the end, it can be accessed to the Conclusion of the contract, in the classic way, or in electronic form.

In the Army, as well as business systems, the provider should have personal computers in offices with access to the Internet, as well as the other numerous amendments to this system. The introduction of computers for this purpose has limited financial resources, but the Army can begin with a small number of computers that are connected to the Internet, which would work in three shifts. From the savings in the procurement exercise in this way, you need to develop the procurement and sales through Internet.

3. CONCEPT OF EFFICIENT AND EFFECTIVE FUNCTIONING OF SUPPLY SYSTEM FUNDS (MS) OF THE DEFENSE SYSTEM OF SERBIA

For effective planning, organization, management, implementation and control of supply MS of the defense system of Serbia, it is necessary to develop the information system, which will enable good-timed and effective presentation of movement of all relevant factors important for the functioning of the system of supply.

Information system should provide:
- timely disposal of reliable management information·
- transformation of management information in the control decisions, and·
- operation feedback.·

Decision support systems have a special significance to the higher levels of decision-making. Its basic components are: users, information (databases), models of decision making (base model of prediction, planning and decision-making) and special software, which connects the user with information about the models.

3.1. Model of electronic public procurement in the Ministry of Defense and the Army of Serbia

In order to adequately meet the needs of all information users about the supply of the defense system of Serbia it is necessary to develop cybernetic model of management and control of execution of all processes in the supply system in the Army of Serbia.
Analyzing the organization and functioning of procurement for the needs of the Ministry of Defense and the Army of Serbia as a proposal for modification of the current structure and functional competence of the Supply Board, which is the holder of centralized procurement for military purposes, so it would be formed a new Department for information and electronic support.
In the figure 1 jurisdiction of the Board are presented for supply as the centralized procurement MS Army of Serbia. Context diagram in figure 1 is a "process of the functioning of supply system MS Army of Serbia, with defined input and output information, control elements and mechanisms.

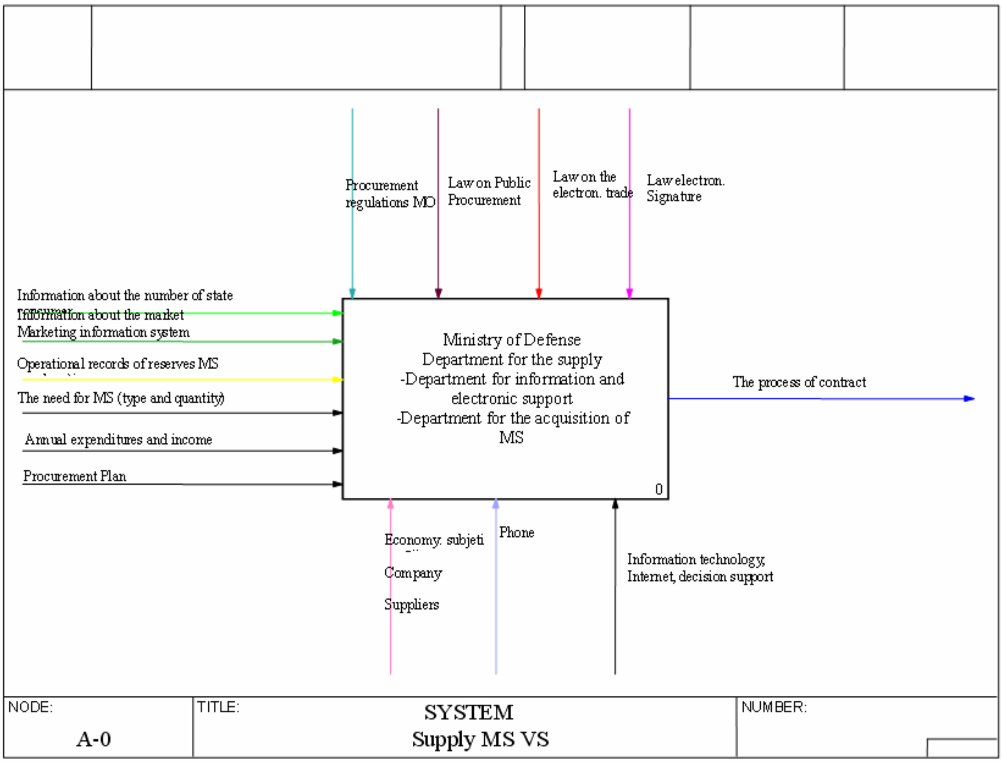

Figure 1: Context diagram of the system functioning MS supply the Army of Serbia.

Studying the concept of electronic public procurement, which is still in the stage of development, we suggest the initial model to organize electronic public procurement that could have been implemented in the supply system in the MS Army of Serbia. Elements of this model would be: E-auctions, e-tender and dynamic system of procurement, contract management, procurement management and sales management.

Management of procurement would be responsible for the creation and preparation of electronic tendering and electronic auctions, as well as for the creation of the structure of the systems for the implementation of electronic public procurement.
Electronic tender would enclose online offer gathering, tender documentation overtaking, confirmation of offer reception, opening offers and establishing contract assignments (all operations would be done online).
Electronic auction meant the possibility of the implementation of emerging and decreasing auctions. Growing auction would be used when selling the surplus of unnecessary things, and decreasing the supply of standard auction items, products and services. E-catalogs are common types of catalogs published by the suppliers on the Internet. The electronic "Reverse" auction, the buyer initiates the auction with the specification of his own requirements. During the auction suppliers are able to accept the proposed requirements and to see the current bids of other suppliers. When auction time, bidders confirm their final offer and see the final bids of other suppliers.
In contrast to the "England auction", which is initiated by the seller and, where price increases during the competition, in the "Reverse" the auction, price falls in the auction to the last offer known to all suppliers. In some cases, large suppliers may be coupled to receive greater discounts on quantity, and so offers greater quantity and lower price products. Contracting management is the very element of the system whose job is to electronically support all the processes when concluding and implementing the contract. That is how, e.g. contracting management would complete online supply payments.
Prospective bidders, as well as the customer would have the opportunity to be informed via the Internet, a client the possibility of direct ordering and direct delivery of goods. This model requires its information technology, the Ministry of Defense and the Army of Serbia.
Sales management, sales organization, except a large number of surplus movable things on the market, would have the task to establish and maintain a database of suppliers, and stores all relevant information about previous and current suppliers, so that at any time could get reliable information on specific vendor . The process of "functioning system of electronic public procurement is decomposed the subprocesses shown in the figure 2.
The process of "Making the concept of electronic execution of the contract" decomposes the subprocesses: Tender, download tender documents, to confirm the receipt of bids, opening bid and contract publishing assignments. Flows of information, mechanisms and controls are shown in the figure 3.

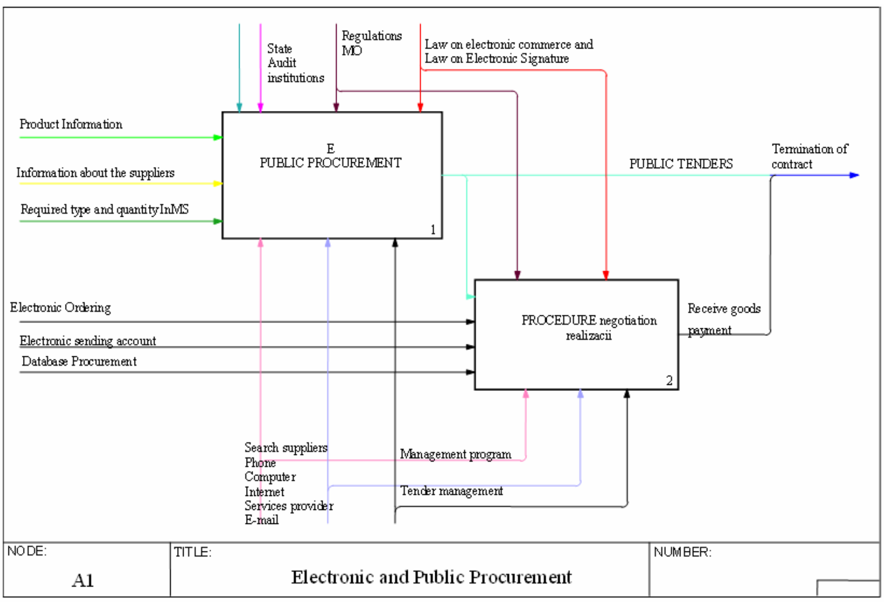

Figure 2: Decomposing diagram of electronic public procurement

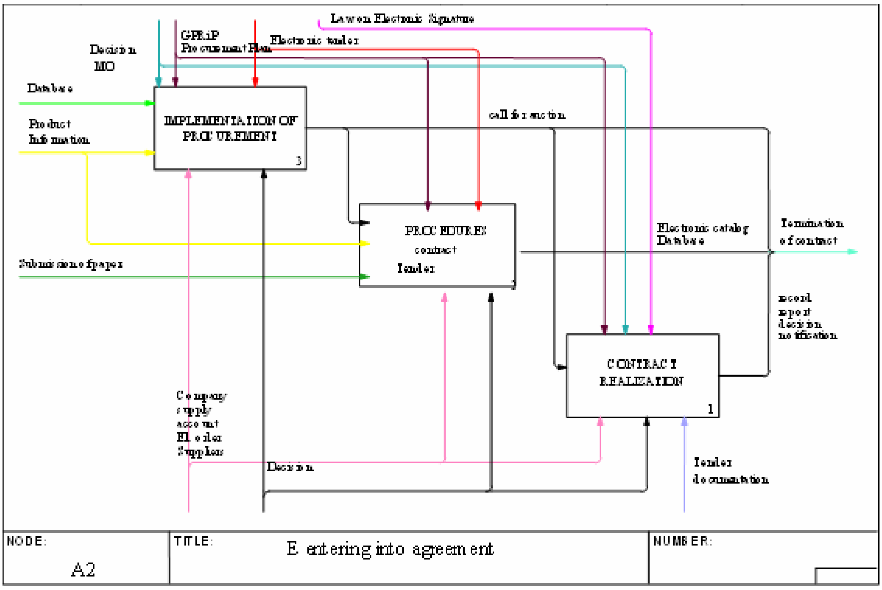

Figure 3: Decomposing diagram of the electronic execution of the Contract

Input information in subprocess "1 the introductory phase of the public procurement procedure "are shown in the diagram - Figure 4, related to: actual strength of consumers (people per category); InMS reserves and production possibilities of economic entities. Control elements: Regulation for the logistics, the Law on public procurement, public audit institutions, the Law on electronic commerce and the Law on electronic signature, and mechanisms are: economic entities, companies, suppliers, information and communication technologies. Output information consists of collecting bids, downloading tender documents, to confirm the receipt of bids, opening of bids, publication of contract assignments and termination of contract.

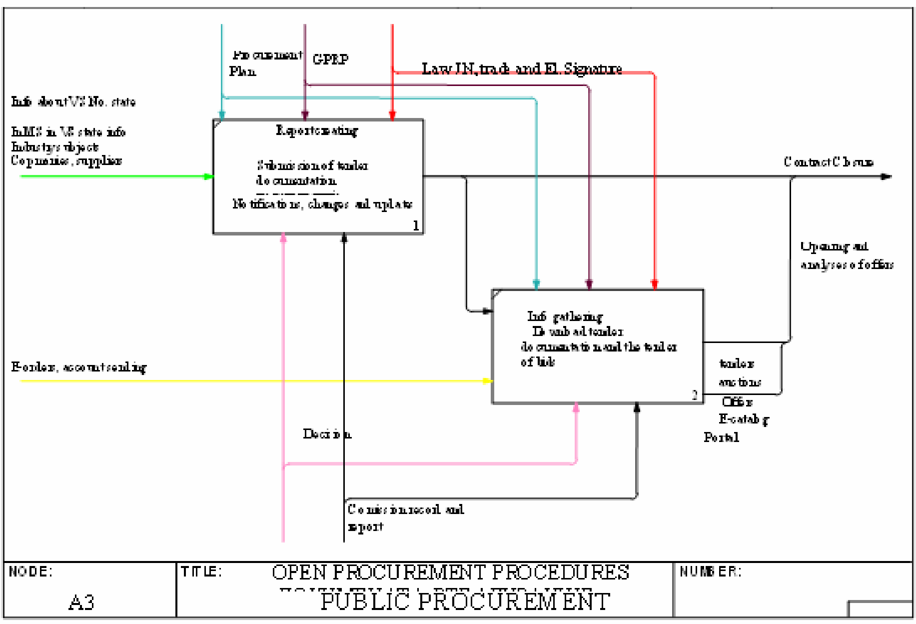

Figure 4: Decomposing diagram of 1^{st} phase of open procedure of public procurement

Subprocess "2nd phase of the Open procedure of public procurement is decopmposing the subprocesses: the submission of tender documentation, receiving and opening of public tenders, bids, approval of the Directorate for Property-Legal Affairs, the conclusion of the contract and notice of award of contract in the Official Gazette.

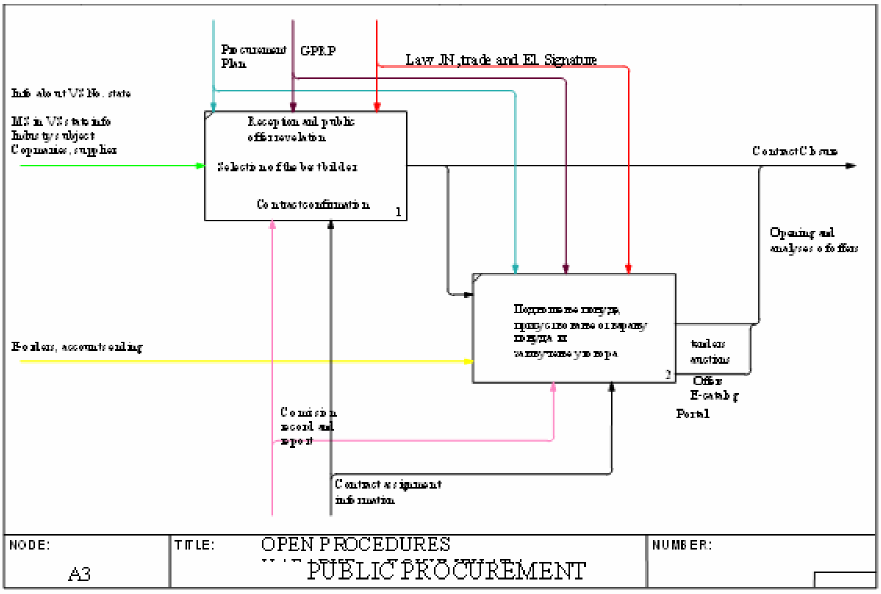

Figure 5: Decomposing diagram 2nd open phase of the public procurement procedure

Dekompozicioni diagram potprocesa "restrictive procedure of public procurement" is shown in the figure 6 Subprocesses "restrictive procedure of public procurement", means establishing tender documents, calls for auction, as well as the Tender with the portal and e-catalogs. Entry information in the process are the requirements and needs of an MS unit, a report on the state of MS supplies in logistical base and other VS units.

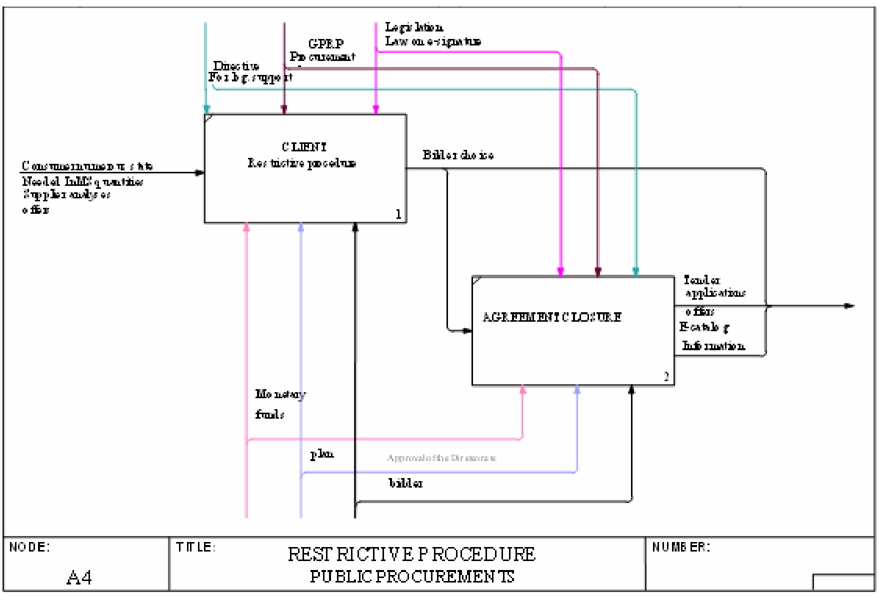

Figure 6: Decomposing diagram restrictive procedure of public procurement

State of MS, every body should follow the general logistics in charge for supply of MS and that makes contact with ministries of agriculture and trade. By the insight into the occupancy of logistics bases, supplies, production possibilities of the enterprise, the general logistics in charge of supply of MS state Occupancy and concludes the need of MS, a body from the relevant Ministry of Trade regulates the provision of the required MS. Output information from these subprocesses are bidding and send electronic orders and order necessary for the acquisition of MS.
The process of "matching procedure with the" (figure 7) includes the development and implementation of documents decopmposes to subprocesses: manufacturing orders, sending e-account, a confirmation of receipt of the goods. Flows of information, mechanisms and controls are shown in the figure. Entry information in the process make the information on the types and quantities required for the MS client.

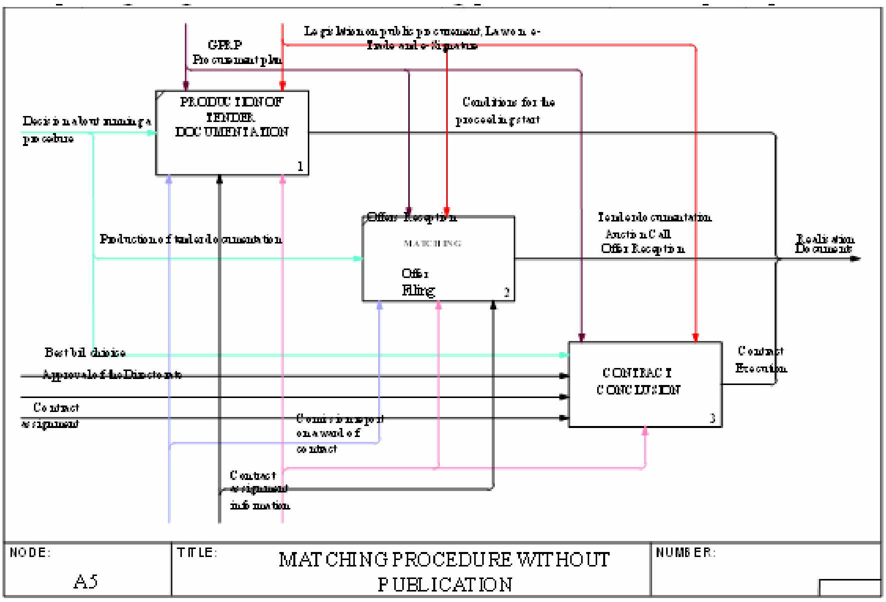

Figure 7: Decomposing diagram with the matching procedure without prior publication

On the basis of this information, are creating and sending e-account to download from MS. Entry information procesy the actual strength of consumers, norms belonging MS. Output information from the process of calculating the amount of MS, which represents the input in the process. The operational log is shown following the situation and having MS and found the missing quantity. Output information from the process are missing the amount of MS that is also the input of information in the process of "Making the request for the filling". The request for the filling that MS is missing units.
By applying this model of electronic public procurement to increase transparency, facilitate the monitoring and control of public procurement in the Ministry of Defense and the Army of Serbia, reduce costs of the Army of Serbia arising implementation of public procurement procedures and costs of economic entities that compete for the procurement for the needs of the Army of Serbia. Competition would be intensified, which caused the price reduction and improving the quality of supply. Access to information of public importance would be much faster than the current.
Presented model can be used by the military unit responsible for procurement and bidders who want to get agreement on procurement of military needs. These two groups can be connected via Internet, in order to search for data that are saved in a database. User can be determined by comparing the password is saved in the database.
When customer wants to implement the acquisition, he can communicate with the system through the user interface looking for similar cases in the database procurement. Database with user information contains basic information relating to clients and suppliers, such as name, address, the main person, contact phone, account number, etc..
The database of the product would contain the names of products, types, number and specifications. It is best to take the experience of the European Union and the vocabulary used in the procurement of which were grouped for all products and assigned them an electronic name.

Database in which the different samples of procurement documents, such as a call for tender, tender offers, contracts, financial contracts, contracts of employment services, instructions on tender offers are being kept, are listed for price bidding, records of initial offers and another.
The fourth database on procurement offers to users the detailed information about the documents and agreements associated with the tender, user opinions, legal procedure, the ability to post questions and giving answers, name acquisition, the subject, the organization responsible for procurement, end date for each individual phase.
Procurement procedure was officially established when the subject of a new procurement was sent to database. After the establishment of procurement cases, customers will be able, through the user interface to open, examine, select offers and sign contracts, and at the same time the system will accept and implement the latest data on procurement.
Internet page "information about the product" contains the specific military standards on the basis of which procurement is carried out while the concrete products over the Internet "sample document" can be found samples of documents about the scheduling of electronic procurement and the tender offers, contracts, financial reports, instructions about the bidding in the tender, with the price offered in the tender and the record of the initial offer. Internet pages will be adapted so that users can take samples of electronic documents that are needed to participate in the proceedings. After selection of the winning bid on the procurement of information sent to and stored in the database on procurement. Vendors tender documentation in the Department of supply, through authorized representatives who come in person in the room and the Board confirms the tender documentation download with its signature.
Guarantee for the execution of the submitted bids are submitting notes or laying a deposit in a bank, using the operating system of electronic procurement, the payment can be made by Electronic Funds Transfer.
Applying the model of electronic procurement for the needs of the Army of Serbia, orbiting of business information will be faster, and the level of competition will increase, which will reduce transaction costs for the military organization, which is required and the cost of the acquisition of military procurement. At the same time, because of the transparency of business information, the potential for abuse and corruption would be significantly reduced.
Knowledge and experience of tenderers who have received contracts for the procurement needs of the Army of Serbia, in the coming period, to assist the customer experience that would use information from the database on procurement, which would increase the quality of information about the market and prevent the possibility that the bidder does not deserve, again receives valuable business.
Information system of electronic public procurement of the Army of Serbia is shown in the figure 8.

4. CONCLUSION

In conditions of limited resources, rational and economical provision of funds in the field of defense, are gaining more and more importance, not only in the countries in transition, which is Serbia, but also in developed countries.
Information infrastructure in the Army is at a satisfactory level, but it is used for other purposes. Some funds are needed for the existing informatics system to connect to the Internet, and the initial problems to be solved. Teams of experts have to solve the problem of data protection
Implementation of these measures would provide the rational use of budget funds with the increase of the efficiency of procurement. At the same time, it would speed up the reform of the Army and its faster adaptation and integration in the Euro-Atlantic integration processes. The introduction of the Internet in the military organization has multiple significances:

- allows quick access to information
- allows comparison of a number of information
- allows faster trade.

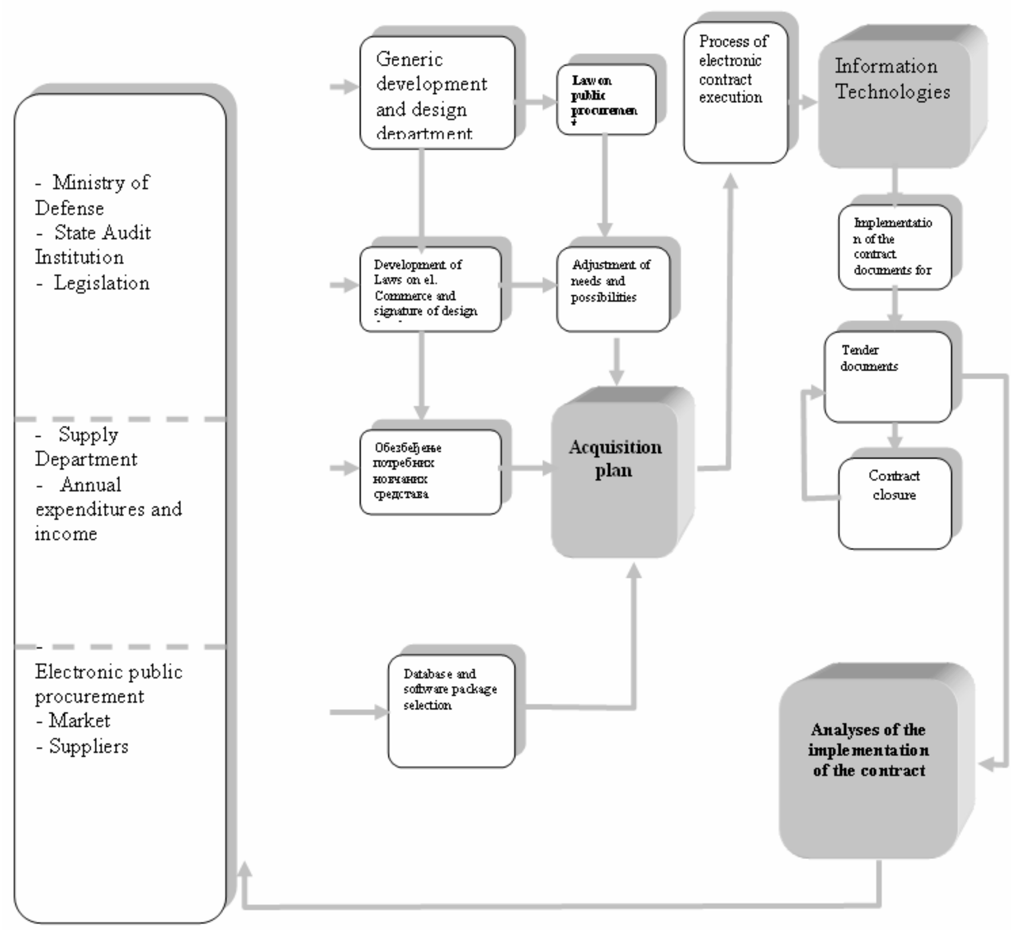

Figure 8: Information system of electronic public procurement of the Army of Serbia

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BASICS OF LOGISTIC MANAGEMENT IN EXPEDITION DEPARTMENT

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Summary: *Strategic management can be defined as directing aware business system in accordance with the relevant environment. This means that the basic meaning of strategic management ensuring the successful functioning of each, and transportation companies, to changing business conditions. Namely, the dynamics of changes in the environment cause the need for proper adjustment of the transportation enterprise environment, which implicitly indicates that the long-term assessment of changes is necessary for successful business. Therefore, the need for strategic management as an imperative set bearing in mind the need that transport companies successfully adapt to changes in the complex dynamic environment, that is to transport the whole system, effectively incorporates the European and world transport system. On the other hand, the choice of development strategy is one of the most important and most questioned in the business in each company of transportation, for which design is the need, not only good knowledge of the relevant environment but also the transportation companies. The aim of this paper is to point out the problems of strategic management in the shipping business and offer the answers to their solution.*

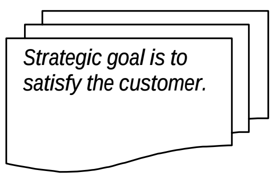
Key words: *logistics, freight, services, organization of transport, an algorithm of expedition companies, expenditure logistics, quality of work expedition companies, logistics functions, basis forwarding, forwarding business, management forwarding*

1. DETERMINATION OF STRATEGIES AND POLICIES

For the concept of strategy and policy, there are numerous definitions. Here we specify only some of them relevant for this work. According to the narrow understanding of the strategy it defines the ways of achieving goals. According to a broader understanding of the strategy it includes policy, objectives and ways of their accomplishment.

Opening one expedition is primarily a kind of intimate story between a man and one idea

- a man above all must have the inner qualities and adequate competence, which will correspond to the idea / project
- the idea that the project does not make sense if it is not in assonance with the idea further progress and improve the results that will contribute to the development and duration.
- The company must be in comparison with a living being. It, as well as that being, can disappear, if you fail to adapt to new circumstances of the environment in constant progress:
- Competition has become international and merciless,
- the client requests are all higher and higher and differ one from another,
- technology is in constant development
- all the more complex services do not allow improvisation and uncertainty in the business.



The existing market saturation lead to a big battles between the companies for occupation of large parts of the market. The competition leads to war between the prices that have an impact on their profitability.

For the company survival, parts of the market goods that bring the most revenue should be increased. And if to use in competition against other companies, a strategy must be created that will get the following three dimensions into business:

- Total control for all the needs of the client,
- optimal productivity,
- consider a company in its essence: do with quality.

Client must be the first concern, which must be subject to all the attention: he must be heard, understood, that he could be better served, and of course, for the best price. Client considers the quality of the offer, and thus the entire company services. The only thing a client sees is the quality of the offer, or the quality of impression he has about it. He doesn’t stand averages and imperfections. He must have confidence in the capacities of his suppliers who are able to consistently provide high quality services. Business company is the one that adapts to the client and his needs, in spite of all the possible changes that may appear in different environments.

2. BASIC WORK ALGORYTHM IN EXPEDITION BUSINESS

In one expedition company, exploitation is the core of commercial, technical and financial roles. "Product is made" at any time. The company lives primarily on the size of its trusting clients, insurance of technical capacities is one of the main bases of operating.

Algorithm of work expedition business is being carried out through two segments, and these are:

- Requiremetns: analysis of client, and his needs and its possibilities of implementation of designed operation
- Review
- bargaining and its setting
- formalization of client offers, signature of contracts
- Realization (dispatch or export /Supply or import).

3. ANALYSIS OF CUSTOMERS REQUIREMENTS

has become the main topic of discussion in the business world is in the 60-is and 70-is and it grew to a prominent place in the 80-is. In the 90-is, logistics was being to discussed as the main weapon in the competitive game. In the future, the creation of working, elastic, powerful and useful supplying chains will determine the success or failure of organizations or even complete business areas. Expeditioner becomes the logistic the moment when he accepted the principles, and acted in the spirit of the definition of the logistics process, which tends to provide leadership and coordination of all activities within the supplying chain from source to target, from production where appropriate, and through distribution channels, to consumers. The goal of logistics is the creation of competitive advantages through comparative achievements of high degree of consumer services, the optimal investments and values for money. Shipping, transportation and distribution can be grouped under a common name: logistics. Logistics planning includes not only transporting the distribution, but also enables the "element of the place" in the marketing mix, ensuring that a product arrives in sufficient quantities in a filling state to places where the consumer can easily buy it. Therefore, logistics management includes forecasting the demands and supplies of appropriate needs satisfaction through material procurement, production deployment, management tools, order processing, storage and transportation. In transport planning problems can be numerous, hidden costs may be too high, as are the costs of staying without stock, which has the effect of loss of business, or delay in business through insurance requirements. Logistics, flow management, primarily takes care of the services. To maintain or increase their share on the market, a company must offer the elements in the figure 1.

This implies that the following four basic functions must be done correctly: in recent years, three major and inter-related themes have changed the solution for logistic harmonization in one part of the world. These are (figure 2):

- Globalization
- information technology
- a chain of supplying.

3.1. Execution of client demands - transport logistics

Transport logistics includes all the steps in the transfer of cargo, regardless of transporting it in one way of transport or in a variety of ways. Also includes the interrelation of different institutions involved in the international freight transport, operators that transport and transport agents which enables the intermediary services in the freight chain. Therefore, customs workers, insurance companies, banks, conveyors, terminals, senders, private carriers and tax officers are considered to contribute to the transport logistics.

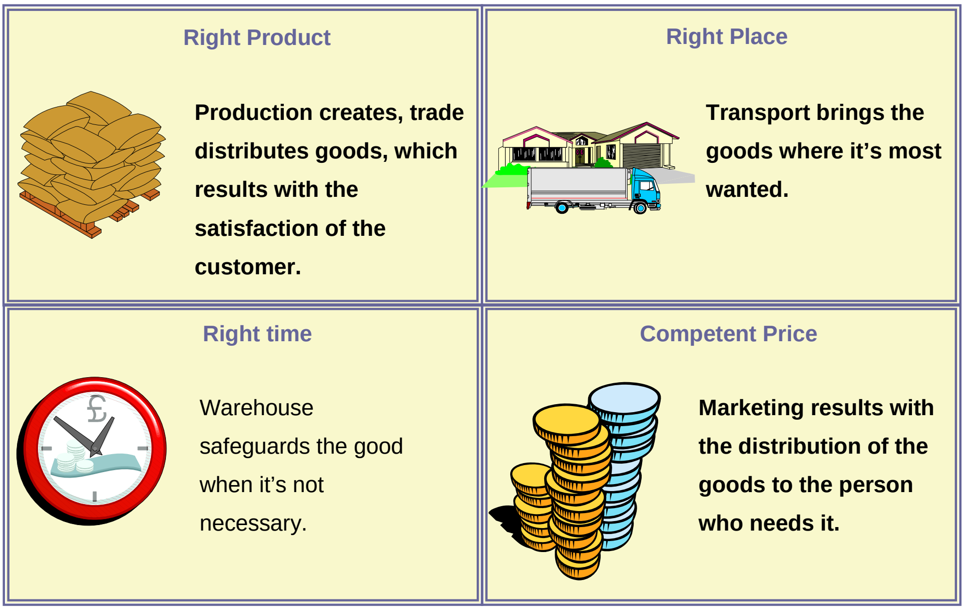


Figure 1: Main elements of market

- **Goods supplying**
- **Goods storage**
- **Goods transportation**
- **Goods marketing**

Figure 2: Logistics functions

3.2. The methodology of solving the client requests - set of universal questions

To realize the request made in its entirety, to meet client demands, to protect his and our interest, it is necessary to master the problem. The road to the knowledge of the requirements, understanding demand, evaluation of feasibility and optimization of alternative solutions thinking through the methodology of universal issues is the following:

Who? - What? - Where? - When? - How?

- Who (is asking for services)?
  - What sector of activity (industrial, agricultural, commercial, etc..)
  - Status (manufacturer, trader, wholesaler, retailer, etc..)
  - Legal status of companies (subsidiaries, copartnership, private, etc.), -
  - size enterprises (size of capital, the number of staff employed, number of branches or representative, etc.) - The financial structure of companies,
  - the ability of financial companies
  - historical creation of companies,
  - the way companies work
  - Ustrojna scheme, company executives
  - companies: Merchant, technical staff, financial experts, etc.
  - Client companies (in the case of export) or its suppliers (in the case of export).
- What?
  - Type of goods,
  - Specification: dangerous goods, perishable, current, goods that need special permits,

– value of goods
– storage and packaging
– package size (weight and volume).

➢ Where?
– Town shipping, deliveries, company
– Differences between vendors / customer / ordering
– Access destination place
– over customs.

➢ When?
– Date and time of giving of goods available
– preferred / required date and time for delivery,
– Preferred time for embarkation / disembarkation,
– Honorary
– Frequency, arriving in time.

➢ How?
– Inco terms, the geographical distance of goods for shipping,
– Tools for storage in a particular place
– Conditions imposed by vehicles
– Upload documents
– need visas for transit / entry in one country
– Upload proven to benefit, banking confirmation of payment, etc..
– information obtained (by whom?),
– provide information (who?)
– Move through customs: The over custom places, impose companies, circulation of documents, hold the tax office,
– mandatory crossing (for example port by document credit transactions) .

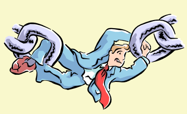
 **Globalisation**	**Logistics systems are faced with reducing costs and increasing consumer services, while enterprise expands its international operations in the search for new markets, new materials, new sources and new production views.**
 **Information technology**	**New, faster and cheaper computer hardware, software and communication technologies allow aggressive companies to replace expensive inventory, transportation and other traditional logistics costs with cheaper information degree.**
 **Supply chain**	**If a company strives to build a closer working relationship with key suppliers and key customers, good logistics related processes are the key component of successful supply chain management.**

Figure 3: Changes that affect logistics

3.3. Justification of the Feasibility Study

Consideration of justification of entering the business arrangement applies to the following points:
- How to achieve the following objectives:
  - Customer Satisfaction (hard commitment)
  - Satisfaction with the supplier (hard commitment)
  - Profitability.

Logistics strategy becomes important when shipping (the company) increase involvement in international operations. Coordinated logistics strategy are essential for saving between partners and consumers. In the implementation of harmonized strategies, companies can create value for consumers, reduce costs and support critical production adaptability. Elements of logistics strategy of shipping companies are given in Table 1.

Table 1: Logistic forwarding strategy

Structure	Infrastructure
Equipment Network **Process Operation Technology** **Logistic Process Technology** **Okomita integracija**	**Labor force** **Planning-control operations** **Planning-control distribution** **Quality** **Services for consumers** **Organizational funds**
Financial strategy of expedition company	**Human resources**
Merging and acquiring **Management of stock, dividend policy** **Long-term financing** **Capital management** **The management of taxes** **Risk management** **Financial institutions**	**Employment** **Training** **Work account**

Types of mutual activities with service firms:
- Inter-communication between workers and consumers, which depends on the behavior of employees, about what you say and do and how to say and
- interrelation with various physical and technical means of work organization, such as sales machines, documents, waiting room and equipment needed in serving the process of production, etc..
- interrelationship with the systems, such as system latency, placement systems, billing systems, dispatch systems, maintenance and repair,
- Interrelations with contracting meetings, forwarding requests, etc.. other customers at the same time involved in the process

Successful logistics services depend on:
- The number of skills of staff
- working hours, schedule time and time
- Location offices, workshops, affiliated used for different tasks
- internal and external offices, workshops and other services, etc..
- tools, equipment, documents, etc.. affiliated services, etc..
- Number and knowledge of consumers involved in the same time process.

? **What are the differences between services and physical goods...?**

4. FEATURES OF SHIPPING-LOGISTICS SERVICES

It is difficult to determine what is thought under the service because most products you buy contain a mixture of elements that are related to trademarks and service elements. Meal in the restaurant contains a combination of elements of the commodity (food) and service elements (the way in which food is served). Even a "clean" goods such as construction wood, often contain service elements, such as the services required to transport wood from the building where is produced to the place where they should be a buyer. Common services are given below:

- Services are more or less unobservable.
- Services are activities or a series of activities rather than matter.
- Services are to a certain degree of produced and used same time.
- Buyer work in production, to a degree (Gronoss, 1990, pp. 29)

Table 2 explains the differences between services and physical goods (Gronoss, 1990, pp. 28) The marketing mix for transport services is given in Table 3.

Table 2: Differences between services and physical goods

Physical Goods	Services
Observable	**Unobservable**
Unique	**Not unique**
Proizvodnja i distribucija odvojena od potrošnje	**Production, distribution and consumption are the same process**
Thing	**Industry or a process**
Relevant value produced in factory	**Relevant value produced in the interaction of buyers and sellers**
Customers (usually) do not work in the production process	**Buyer participates in the production.**
Can be held in stock.	**Can't be held in stock.**

Table 3: The marketing mix for transport services

Product (service)	Price
Target markets. Services. Level of service. Renting, leasing, sales. After sales services. Warranties	Renting, leasing, sales. Structure and time. Discounts. Terms of payment. Adaptability. Custom guaranteed value
Place	**Representation**
Location. Accessibility Distribution channels. Broadcast coverage	Advertising. Ad. Public Relations. Sales through the dealer. Sales through the service provider. Training employees when it comes to relations with customers
Process	**Participation**
Needs and desires of consumers Enabling customers Verification requests Verification of quality Monitoring customers Guidelines and procedures Course activities	Interdependent behaviour Skills. Views. Confidence. Used tactics Frequency of agreement with the consumer. Selling activities. Training
Physical Evidence	
External appearance of the place Interior look and atmosphere The appearance of employees Qualifications of employees. Equipment. Materials	

Organization of transport between the manufacturer to the place of dispatch, to the end customer. Most products are sold in highly competitive markets and therefore in order to achieve savings must enable the controlling equipment companies. This can be done:

- predictive of consumption
- control transport
- following delivery
- management of entry order
- surveillance equipment
- management process

In order to minimize total logistics costs, hierarchy decision must be made.

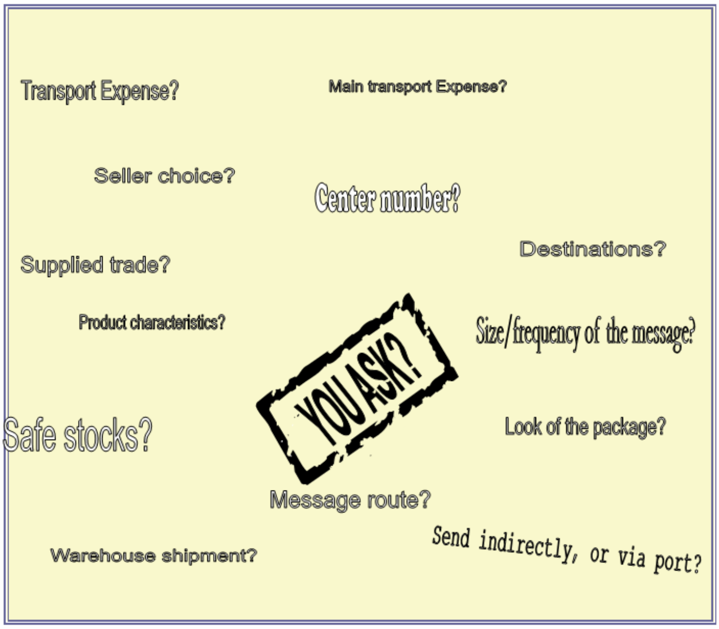


Figure 4:

5. TOTAL LOGISTICS COST (TLC)

It is very important to estimate how much you spend on the full logistic operation. Logistics costs are dynamic and do not fall under traditional accounting methods. Accounting difficulties become overrated when trying to determine the cost for a particular operation, a consumer, or estimate external source or when the increase in profit. Cost based on the activities can be used to help companies in the management and measurement of the amount of logistic costs. The table below shows the total logistics cost factors:

Figure 5:

5.1. International transportation costs

International transport costs can be defined as direct and indirect costs, which are accompanying the carriage of goods from point of embarkation to the destination. The definition of cost can be based on parameters from port to port, door to door, from port to door or door to port. Most of such costs amounted to the cost burden with the costs of internal cargo handling costs are higher than by sea. Other transport costs include the some or all of the following:

- Handling charges
- Costs of storage
- Cost of insurance
- Documentation
- Dealers and mover
- Costs incurred by customs
- Banking costs
- The costs of administration.
- The costs of protection

Figure 6: International transport costs

The costs of obtaining insurance result in additional security measures to avoid delay and loss due to theft of goods in transit:

- Costs incurred in the incorporation boundaries, the cost of testing sanitary and health inspection.
- Additional costs due to delays exceeding the normal transit time and volatility traders.
- Elements of monopoly, increase the cost of transportation investments and informal payments.
- Loss for failure to restore containers on time.

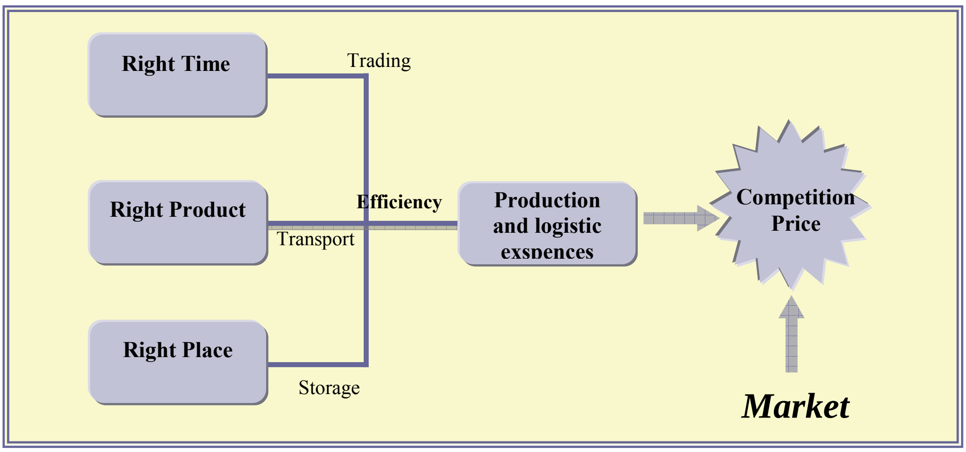
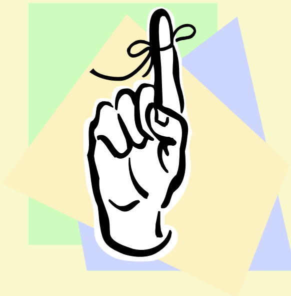


Figure 7: According to the competitive price

- **Ordering, loading and unloading.**
- **Costs of storage.**
- **Costs of safe supplies.**
- **Loss and damage.**
- **Deterioration in relation to the durability.**
- **Transport costs.**
- **Invested assets in transit and storage.**



Procedures and documentation can have a strong impact on transport costs. Exchange of goods require not only the physical transportation of goods, but also the exchange of information, which are usually encoded in the documents. The movement of money as payment for the fulfilment of the contract, complicated procedures and documentation that have direct impact on costs.

5.2. Quality of service management in the freight and logistics

We are witnessing simple grade "You know, they are a little expensive, but with them the service is full, quality and I am free of all worries.", Says satisfied client. Contrary to a Happy there is a negative buyer with complete evaluation of the quality of service forwarding "You know, even if they were free of charge, I do not want to be exposed to such nonsense, delays, disabilities and other unreasonable actions."

Expenditure decreasement

Try to simplify transport process where possible. Reduction procedure documentation will reduce costs and increase competitiveness.

Customers determine the quality. Quality is a deference to the customers requirements. Customers decide what is considered a good quality, what is important and what they see as irrelevant in the production of services. They also judge on wanted quality of service.

Quality is a journey ... formula for quickly balancing the quality of one infinite does not exist. Good quality must continually strive, when the growth of profits, and when the times are difficult.

Quality is everyone's job ... Everyone has customers, internal or external customers. Responsibility for the production of quality and check the quality can not be entrusted to one person or for example, workers in the office. Everyone must see the production and delivery of good quality as your personal responsibility.

Quality, leadership and communication are indivisible .. In order to production of good quality, people need knowledge, feedback, information, support and encouragement of their leadership, and they must show true leadership when you manage your subordinates.

And quality are inseparable entity .... good quality search culture that encourages collective entity. Honesty, the one treating customers and employees, must be the most important value on which everybody cares.

Quality is a matter of shaping ... Quality services must be shaped in advance. Use technology and staff, and participation of customers in the system of production services must be prudently in advance. Otherwise, the organization is only partially ready for the production of good quality.

Quality of services is keeping the promises ... More than anything else, customers expect from the service provider to do what they promised. If the promised is not executed or if a critical part of the promise is not kept, the quality gets worse.

6. CONCLUSION

The main task of management in business logistics forwarding is to free the customer of all worries. In order to achieve this level of service it is necessary to profile new staff in logistics management, which can adequately fulfil presented challenges. Namely, today's customers are demanding, logistics chains are complicated and complex, way of the resources to target the harmonized requirements of a multitude of interests and goals of each link separately. Management of logistics has disposal of resources resulting from the principles of logistics, services, and sub-services, knowledge and skills, algorithms, known and recognizable philosophy of "JIT", but only blameless management and control processes in the logistics can get answers to the statement from the introduction "Customer is satisfied".

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URBAN LOGISTICS SERVICES

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Summary: *Treatment of logistics activities as a system that optimizes financial and information component of the commodity flows in the territory of BiH is still unknown. Answer to the question: Why logistics service? Basic elements and structure of logistics services are processed in the part of the practical review of the basic elements of their connections and the like. The final element of the work is dedicated to the practical functioning of the logistics service provider with the application of information communication technology in the functioning of the logistics system.*

Keywords: *Logistic service, logistics chains, elements of the service, city logistics, entities - objects logistics services, marketing logistics services, logistics service attributes*

1. IMPORTANCE, NEEDS AND STRUCTURE OF LOGISTICS SERVICE

Basic characteristics and purpose of the development of logistics service is the initial establishment philosophy Logistical and create habits of customers to use services in the sphere of all essential logistics activities of transport, encouraging the development of the economy, the stock exchanges of cargo, forwarding and other services. How is our current level of development of the logistics very low, about the problems and the benefits provided by CITY logistics that is virtually unknown, we believe that it is justified to consider transit as a solution to establish the logistics service. The very definition of the concept of service, reminds us in providing services to our terms of service delivery to clients interested in the field of all sectors that are contained in the concept of city logistics and logistics in general. The starting basis for the development of logistics service system shall supply and demand, and logistics experience scenarios of association - associating the city means services which provide fuel services, transportation in one or more of the covenant, which meet a range of functions necessary for the swift delivery of the life in the region. The aim of this association is to create a basis for a single serving of the region based on the coordinated work and unique regulations. Logistics service will be organized on the basis of the real system, as a set of objects (entities) and their mutual relationship. Whose basis shall be the database, which will be updated in advance and databases that will own clients to update and activate. Each database will be maintained on the basis of World Records as the aggregation field or group of fields and files as a collection of records. Restrictions will apply to the breadth and freedom of access to databases depending on the status of the user, client, namely permanent members and occasional members. All clients (a group-permanent, casual, etc.) have the same treatment accession network databases and information to meet their needs and requirements. Development of special information and communications systems as well as the introduction of telematic system will provide interested customers - customers very fast access to large numbers of information, higher quality, at any distance in the city. Analysis of developed logistic centers in Europe speaks of logistics service as a basis and an essential element of establishing the logistics center, etc.
Basis for the creation of logistics services will do a detailed analysis and elaboration, and creation and access to complete databases and their connections, and establish a possible realistic model and applicable in the actual framework and validated in practice. Problems to be expected in our case, can result as the result of poor understanding and ignorance, and the readiness of relevant institutions to understand the concept, the essence and the logistics. But, aware that all steps in the sense of pioneering weighted more than we are aware that risk. We appreciate that the logistics service and provide and how great contribution to solving urban problems of cities in transition, reduce costs, reduce doubled and zero drive and create the preconditions for development of logistics centers and the system as a whole.

2. EFFECTS OF URBAN LOGISTICS SERVICE

The formation of logistics services for the area of the city and the regional character achieves a high degree of realization of basic services such as:
- Facilitating timely information for the performance of various economic sectors, rationalization of incoming and outgoing remote local transportation of goods and cargo integrated transport unit
- Achievement of a successful and productive cooperation in transport and harder linking all participants in the logistics chain
- Unloading highway road network through coordination combination of distribution and collection method leads to a reduction in starting the vehicle, connecting and creating chains of distribution
- Improving the distribution of the urban and wider fuel store not only the industrial and commercial area, but also in the field of consumption, imports and exports, etc.
- Rationalization of distribution and launch vehicles leads to reduced pollution and noise in residential and other areas of the city
- Achievement of a successful and productive cooperation in transport and harder linking all participants in the logistics chain in both the macro and micro-distribution
- Unloading highway road network within the city of timely transfer of required information about the distribution of goods
- Improving the distribution of the urban and wider fuel store not only the industrial and commercial area, but also in the field of consumption, imports and exports, etc.

The formation of the logistics service provide quality and timely provision of information about the real state market, coordination and cooperation of work selecting the best carrier transport in macro distribution and concentration of activities with a single entity serving the urban and industrial zones in the micro-distribution, with a unified information system with links to all the logistics chain.

Logistics service is the basis for the upgrade and development of the city of logistic centers. The basic objective of the establishment of logistical services in the initial phase of development would be integrating all essential logistics activities through creating quality and complete database in the distribution, transportation, legal regulations, link to world stock exchanges and other mutual effect of linking the logistics and customer service are realized in this way as the service providers and users of logistics services, related common interest, and that is profit.

Common links can be established and mediate between them:
- Production capacity region
- Enterprise road local and remote traffic (the primary and supporting service sector)
- Freightage organization
- Rail (with trade, industrial roads and related activities);
- Terminals integrated transport
- Enterprise storage of goods with a different structure and purpose warehouse
- The customs zone
- Import and export companies with additional services, other supporting activities.
- Trading house in the wholesale and retail
- Integrating information and providing extra services, technical services for the care and maintenance of vehicles, etc.
- The execution of control activities and activities in the field of insurance
- Providing information and advice
- Merger of timely information for accommodation, supplying, maintaining and meeting the various needs of application and environment
- Stock exchange cargo with the necessary

Logistic service will interfere with the provision of freight and in the supply cargo space, in obtaining and providing transportation orders, etc. Therefore, all concerned may use the services of service in any approach.

3. LOGISTIC SERVICES IN THE FUTURE

Logistics service is the Information Technology, software appropriate, operationally and economically justified service cooperation at the level of the region.

Cooperation will be subjects of the region divided into categories:
- Providers (transport, distribution, manufacturers, wholesale home and business, IT and other houses, specialized agencies and the like.)
- Claimant (consumers, citizens, carriers, production houses, retail sale actions, micro-entrepreneurial activities, etc..)

- Controllers and regulators (customs and government financial institutions of control and monitoring)
- Operators (agency system software and services with the necessary hardware and other equipment)
- Factors of macroeconomic policy and foreign representatives.

All members of co-operation will be connected in a unique network of information exchange. Development of the logistics service network will provide all the necessary preconditions for the realization of the technological-economic timeliness and access to information, which will be used to improve the macro-and micro-distribution of goods, and optimization of transport and logistics chains. The creation of logistic service opened the possibility for successful and productive cooperation, the analysis of real images of real needs, capabilities, optimizing the transport-distribution of goods and reducing the cost price of products. Easier exchange and connection between the road and railway transport, and time are set based for the development and upgrade of logistics system.

4. BASIC FUNCTIONS OF LOGISTIC SERVICE

Logistics service will have the following features:
- Receiving requests, processing requests and providing feedback to clients
- Primary function in the coordination of transport, the recommendation in the selection of vehicles for handling and storage of goods
- Administrative information function through agents and technical assistance
- Technical-security function
- Functions to ensure optimum performance of the chain of transport-storage-reloading-forming
- Provision of support services and maintenance services (marketing, technical, financial and material support)
- Providing information and advice (rules and conventions)
- Management and coordination of all processes (purchase, transport, delivery, payment)
- The optimal choice for accommodation, supplying, maintenance and meet the needs of the city (retail, wholesale, distribution, ecology, etc.).
- The cargo market
- Specific data with the aim of defining trends (incoming flows of output flows, the season, counting vehicles, traffic and turnover of assets)
- Marketing-unique unite all marketing functions for customers and customer service

5. DESIGNING LOGISTICS SERVICE

On the basis of established basic function of the structure of each logistic service makes a connection with each other and unite the following content on the logistics service.

The outline of the structure and development of logistics services make the management system database. Software system storage and search of data by different sectors and have same as the output results from the opening and closing the account and received requests to:
- Database sector transport and distribution - that consisted of information companies local and remote road traffic (with the support and service activities), divided by type of transport, carrying, available capacity, position and readiness for the execution of tasks, etc.. Access to this base will ensure all users with minimum waiting time and the ability to search the same and changing and updating their own data.
- Department of Information and Legal Affairs - information shipping organizations and legal service to have data from the exchange with the clauses changes and amendments to rules and conventions on the local, micro and macro level and at the level of EU standards department to facilitate the task and save the time required for solution legal regulation client requests.
- Database services department will have the tasks of integrating data on the availability and capacity cargo, industrial roads and related activities. Dictating school readiness and support to the individual in the European Railways, announcement cargo and car demand in the direct exchange of data with the relevant sector railway companies.
- Database-storage area to include all companies for the storage of goods with a different structure and purpose warehouses, sites that have type and capacity of services, how to save, manipulation, storage type, location, and the possibility of dictating needs-meeting requirements. Daily updates of free capacity and the degree of absorption-Occupancy.
- Database government sector - the customs zone and the customs terminal, the availability of data that the government made in terms of preliminary, amendments and annexes interstate Agreement bilateral, multilateral and other agreements and on any prohibitions and recommendations, discounts and stimulus, and the like.

- Large database of clients - import and export companies with additional services, the better developed the existing wholesale distribution network with the available capacities and capabilities exchange information, quantity, type, price, method of delivery-distribution and the situation in the warehouse;
- Database marketing - professional marketing agencies and media houses defining the strategy representation, promotion and presentation, cargo, transport and logistic services to the public.
- Database for IT jobs, unite and to point out the way for the installation and the establishment and involvement in the joint information system, logistic services,
- Databases of other service agencies secure the information available about the technical capabilities and coordinate in the resolution requests assistance in the way of technical maintenance resources, service and replacement, and the like.

TRANSPORT DATABASE	**INFORMATION-LEGAL SECTOR**	**RAILWAY SECTOR**
transport and distribution would make data about companies of raod local and remote traffic (with basic and supplementary service actions)	Information legal affairs - shipping organizations and legal information service	database for the coordination of railway cargo, industrial roads and related activities
TECHNOLOGY MANIPULATIVE	**STORAGE SECTOR**	**CUSTOMS FREE ZONE**
information on the terminals of integrated transport organization of internal transport	availability and capacity of companies for storage of goods with a different structure and purpose of storage	Government sector - the customs zone and the customs terminal
WHOLESALE	**MARKETING**	**INFORMATION SYSTEM**
sector of large clients - import and export companies with additional services	sector of marketing - professional marketing agencies and media houses	information system, logistic center with modern software and hardware organization

Figure 1: Preview of basic databases of logistic service

In addition to the structure shown in the administrative sector would exist to the so-called Central logistics service agency that coordinated and ransacked database securing and feedback from the logistics service work of all of the above sector consisted of the following units:
- Exchange burden
- Unit for connection to the external environment
- Information communication unit

What would be depending on the characteristics and nature of relations with certain sectors were in the direct and indirect connections between subsystems.

6. MARKETING OF LOGISTIC SERVICE

Elaboration of marketing activities in the development of logistics service
One of the basic moves to discuss this issue begins with the preparation of the marketing plan. General marketing plan has the task to connect all marketing activities are directed towards one common goal. The greatest importance to the marketing plan is to streamline of the development of market orientation and business logistics services. Therefore, one of the first and the main objectives of defining the target market, i.e. from the aspect of the establishment and development of logistics services to a target market of the town and region, and all economic and legal entities who are interested in using the logistics services (providers, claimant, etc..) .
The plan will be used to order the following activities:

Analysis of the Situation-objective analysis of the state of business, small and medium-sized business customers, one word to record the right situation in terms of a diagnostic assessment of the situation. The estimate should be provided to the interviewing and recording of real data on the market, the scope, size, trade advertising, exhibition materials, and cumulative meaning rule facts.

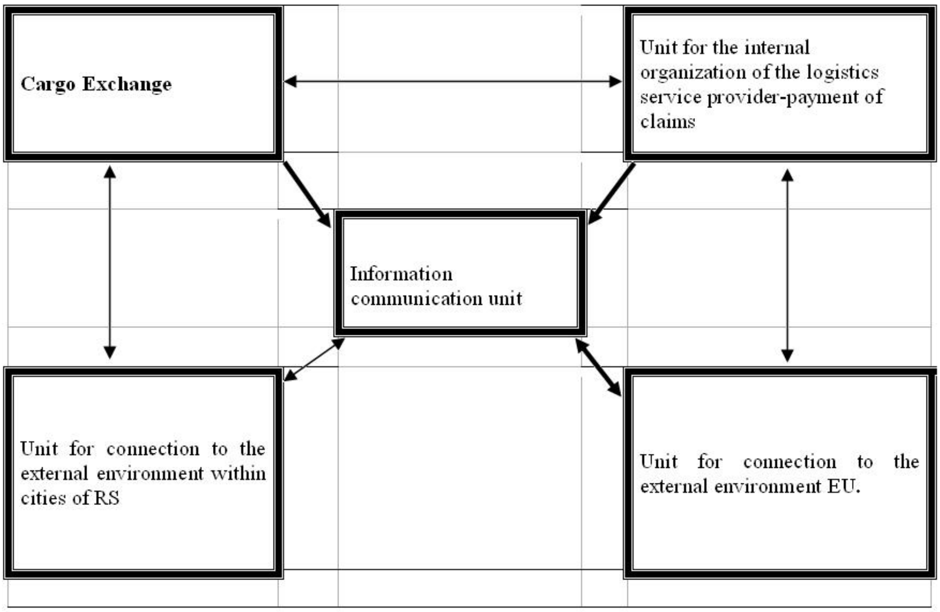

Figure 2: Structure of the central agencies of logistics service

- Generate a report on marketing goals-Where we want to go? Provocative materials animate the need for decision problems, emphasize the advantages of one service, and the like. Advertising, promotion services logistic services, advantages and possibilities of providing services to the service, savings, etc..
- Improve management of logistic service in all phases of distribution planning, strategy and business design-users of services logistic services, benefits, awards, etc..
- Analyze the economic trends in the region on short-term, long-term and general review of economic data.
- A study of sales trends, which are seeking to market goods and flows of imports and transit movement of goods through the RS in order to time contact with clients from the closer and further environment that are in the input-output flow of goods.
- To present the analysis of profitability of service logistic service.
- Building PR (image logistic services).

Marketing logistics services is a complex area in the modern conditions of market economy is a necessity and has a significant place in the development of logistics services. Therefore, it is necessary to team planning and marketing support by ensuring the development of logistics services.

7. CONCLUSION

In accordance with previous marketing plan activities, update the plan would planning strategy for the introduction of logistics services to the market in a new way of doing business and raising the quality of services. Therefore, this issue must devote special attention and need analysis.

The process of introducing new ways of providing services is a risky move and seek his confirmation functioning and economic effects in practice, and confirmation of the introduction of new ways to market services will only be if in a certain period of time such as confirmation and receive a refund on investment.

In that sense, it is necessary to once again return to the beginning of the procedure for the introduction of logistics services as an innovation in the communication market. In parallel with these activities, it is necessary to make the analysis of feasibility of the introduction of logistics services.

- The first stage of analysis do the data analysis and market studies of customer service. Comparing foreign sources with similar experiences in the work, and experiences from the basic investigations.
- The second-stage includes the analysis of competition and offer suggestions user logistics services through applied research and analysis capabilities of the service.
- The third phase is the so-called business analysis, which involves testing the concept, identifying the desired characteristics and rentability. This stage demands an exceptional team work, customer contact and evaluation of the cost of introducing the logistic services, as a separate element of assessment of future activities. Business analysis is a very important stage, will be based on the number of information, must be the answer about the potential demand for this kind of service, ability to follow the work of customer service and their involvement in the use of the same service.
- The last stage involves the market test. On the basis of the known methods of introducing evaluation of new products, the introduction of cost and profit to determine the number of iterative repetition of points that will determine the market test of justification of the introduction. Ranking system is one of the factors of decision making and the other factor representing logistics service rating the acceptability of which get an answer about the profitability logistic services.
- The final stage for the introduction of logistics services to the market will be reflected through a study of users and possible revision of the service, receiving customer complaints, examination and control of services. Promotion of logistics service is the final stage of the introduction of logistics services to the market and the putting in the work function.

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MANAGING TECHNICAL AND TECHNOLOGICAL DEVELOPMENT OF PLANNING THE PRODUCTION PROCESSES IN JEANS PRODUCTION

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Summary: *Technical- technological development of planning production processes in jeans production is expected to make a general atmosphere for accepting the changes and the new approach of setting up the modern concept of developing, managing, and including all available sources. To achieve this aim, it is necessary to set up a modern organizational and management system which must include the following characteristics: flexibility, modernization, adaptibility, openess, efficiency, evaluating and controlling the processes, quality and successfulness in every production stage. Concerning the fact that modern technology is present in many companies (CAD/CAM system in the process of technical preparation and cutting stage, computerized sewing machines and authomatized machines for jeans finishing) there is a need to manage technical and technological development. Aim: The main aim of this work is to show the development of global computing system which gives the possibility of technical and technological development in jeans production processing, which affects the managing, modernization, flexibility and optimizing in garment processing.*

Key words: *Managing, development, computing system, CAD/CAM*

1. INTRODUCTION

Garment Industry produces several hundred different types of garments with a thousands of variations. Thanks to scientific technical progress in this area , the most modern technologies in jeans processing have been developed . The present level of modern technology in garment industry in Serbia (Novi Pazar), varies from sewing machines with micro-computers , specialized sewing machines, authomats to programmed sewing machines with microprocessors, robots and CAD/CAM systems. Transporting system varies from mechanical or conventional transport to computerized machines.
This work will show the development of the others computer technologies, as well as, the systematic approach and managing in garment industry and in development of garment industry,too.

2. SYSTEM APPROACH AND MANAGEMENT IN GARMENT INDUSTRY

While defining the management in jeans production organized in a modern way, we must, before all, start from the essence of management defined within the general system theory. So, if we methodologically look at the management in textile industry as a unique system with several sub-systems and , within them, elements connected by the principles of reciprocity and inter-dependency.The first task is to define contemporary aspects of the mentioned principles, as the base of interactive connections of individual elements within the system of management [1].
In contemporary textile industry, the three determiners are important; they,also, define the term of contemporary principles of reciprocity and inter-dependency, and they are:

1. Extremely dinamic competition in offering products of worldwide jeans industry without the limitations imposed by local markets,thus, with completely free goods and profit exchange;

2. Extremely dinamic exchange of informatiom on new products, characteristics of their inputs, characteristics of the markets, prices, sale conditions, etc.
3. Contemporary way of transportation which allows fast moving of the inputs and outputs to a desired location with minimal costs and with tendency to make the world jeans market ,by all characteristics, equal with once dominant local market.

a. So, the three determiners mentined above , in modern jeans industry significantly define the managing system itself in a jeans company, as a micro-element the world jeans industry. Concidering all mentioned above within the managing system, in "Nesal" company, we can define three sub-systems, by which interaction the management wants to accomlish the main goal – longterm profit maximizing with increasing presence of Nesal products in limited markets where this company operates:

- Inforrmation sub-system
- Sub-system of making management decisions
- Sub-system of decisions implementation.

3. INFORMATION SUB-SYSTEM

Information sub-system includes the set of different subjects and methods used for gethering the information which are used as a background for mamagement decision making. The subjects of gathering the information are:

- commercial department with sales executive
- sales executive on the field
- managers of wholesale in Belgrade, Zagreb, Brčko, Priština,etc.
- the company owners
- the clothes constructors

3.1. Methods of getehering the information

Methods of gathering the information are: direct contacts with the customers and the suppliers of basic and auxiliary fabrics and tools, direct visits to fairs and presentations in the country and abroad, the Internet , fashion magazines and contacts with the producers and distributors of the new equipment, as well as, the finishing chemicals.

3.2. Types of information

- Information on current fashion trends, especially at different types of jeans finishing, different types of fabrics for garment production, garment design, details (pocket type, threads combination,etc.), trends i models(deep,short forms, ''bell-like'' legs,etc.).
- Information on the offer and prices at the local and foreign jeans market competitors.
- Information on the offer and prices of basic fabrics, accessories and tools in the local and foreign market.
- Information on the basic production expenses in the foreign markets.
- Information on current changes in regulatory rules which define jeans products exchange in the local and foreign market.

3.3. Sub-system of making management decisions

Management decisions could be short-term and long-term. Short-term decisions are the following:

- select the season collection,
- incorporate all the elements of fashion trend with season collection,
- plan to provide basic and auxiliary material and tools
- defining target groups and priority markets ,
- defining the methods for promoting a new collection by sales channels,
- defining the needs for providing new equipment and using new chemicals for jeans finishing in order to complete the season collection,
- planning the capacity ,
- engaging the labor, etc.

Long-terms managemant decisions include managing directions in company development from the aspects of winning new markets , increasing the participation of certain product groups in overall offer,develping new products, long-term invests in personnel, equipment, promotional activities and sales channels (establishing new branches,new wholesales).

Making strategic decisions include production dislocation, emphasizing developing the service because of icreasing costs. Subjects of making managing decisions are company owners with company executive and executives of key sectors (commercial, financial, technical preparation and production).

3.4. Sub-system of decisions implementation

Company organization:
1. management,
2. commercial sector
- local maket sale
- foreign market sale
- purchase from local and foreign mareket
- foreign correspondence
- distribution channels (wholesale Belgrade, Zagreb, Brcko,Pristina, Novi Pazar)
- retail network (boutiques in Belgrade, Kraljevo, Krusevac,Brcko,etc.)
- commercialists on the field
- wholesale warehouse
3. financial sector
- bookkeeping
- operatives at home and abroad
4. personnel
5. security
6. dinning hall
7. maintenance service
8. transportation service
9. technical preparation
10. sewing plant with embroidery and printing plant
11. plant for special treatments on the finished products
12. plant for finishing

The fact that the number of researching projects in the management area is increasing has no affect on clothes producing technology. The problems of exact managing in the area of clothes technology haven't been given much attention up to now , because, today, the new information technology has imposed the need for managing all systems in garment technology.

What does it mean – to manage the systems in garment industry?When ones knows that "manage means choosing managing activity" than, in garment technology, it is the possibility to choose out of several managing activities ,the one that will give optimal results.

In garment producing technology, ie. important companies, it is easy to choose the activities that give optimal results. Choosing the activities depends on the goals of management . So, important point before choosing the right management activity is setting up the management goal.

Every management task (managing the system in garment industry) is define if the following are known:
- management goal
- limitation in choosing the management activity
- existing adequate maths model for individual problems in production process.

Managing in garment technology goes,mostly, through two stages: choosing the managing activity in the first and carrying out the management in the second, which means doing the chosen managing activities.

To enable exact managing in germent technology the first to do is to make an algorythm of management where a managing activity would be determined on basis of the input data. Realization of the algorhytm is,in fact, determining the management (realization the chosen management activity).

4. GARMENT TECHNOLOGY DEVELOPMENT

Process of clothes production has developed along with the development of human cognition from primitive manual and vocational to industrial and serial. 150 years ago, since the invention of the sewing machine, started mechanical sewing. In this period, clothes producing was increasing, what was caused by general development of science, technique and technology. Development of engineering led to the development of machines production, complicated machines mechanisms and invention of mechanically guided sewing. Application of automatics and electro-mechanic led to the invention of sewing, cutting and ironing automats, as well as, the automats for other production processes. Development of electronic compositions and components had a crucial importance in technological operations in clothes production. The last 30 years has significantly contributed to the invention and development of electronically guided machinery systems in clothes industry, with number of automatic functions, better technical equipment and number of additional appliances. The appearance of micro-computers has enabled connecting different production systems, use of mechatronics and industrial robots. Immediately after the appearance of computers , clothes producers started their appliance in business and after that, in operative preparation for production. Connecting far computers, direct communication, using the same data or their fast transformation, coherence of technical preparation with production process have led to the appearance of CIM conception in clothes production.

CIM – computer integrated production includes sets of different computer systems intended for different tasks,as:

CAM – computer aided manufacturing

CAP – computer aided planning

CAPP – computer aided production process

CAE – computer aided engineering

CAQ - computer aided quality

ADS – apparel design system

These characteristics have special meaning at garment industry where changes in production process is an everyday advent. There is, also, QRS system strategy of fast response, ranking from market demands to wishes and needs of the consumers . This strategy ensures a fast response to market demands, just in several days.

There is JIT strategy (just-in-time) within given terms. It reflects in preparation of production process , to find solutions in very short terms.

Data system for body measures is outdated in many countries so it does not meet the customers needs. Many countries are interested to measure individual customers who wants a certain model and they are sent by e-mail to the factory. This process takes 24 h from the moment when a customer chooses a model, that is, than, designed and produced in computers, to shipping to the customer.

Intelligent garment production connects four important factors of production and sale: buyer, global salesman, textile producer and garment producer. By this conception, the buyer chooses a model: fabric, colour, fabric texture and observes the simulation of the virtual fashion show where the characteristics of that apparel are presented. By that computer simulation, he has an insight in characteristics and apparel final look, human image and virtuel ambient. He,also, can see computer simulation of how the fabric moves and wrinkles while walking ,as well as, how the buyer would look in that apparel. .[4]

It is possible, by knowing the type of fabric the apparel is made of and its construction, to make a pretty real image of the apparel that can be used for on-screen presentation . It is possible to simulate the human image with moves and animated pose. It is possible to simulate a man while moving, walking, fast walking, running, as well as, the background like catwalk, business enviroment, countryside. Additonally, it is possible to adapt the human body model to a customer's size. The aim of global production and sale is to produce made-by-measure clothes, i.e. unique apparel. Many producers, today, produce devices which can scan three-dimensional human measures in only few seconds. Puting those measures in e-card makes possible buying in all stores. This allows the customer to buy clothes that fit. Global production assumes computer organizational, logistic and financial connection between the buyer, global salesman, textile producer and garment producer. This connection allows purchasing clothes from home, delivery in only few days, payment and sharing the profit within the global sale chain. Automatized sale is done on EPOS site. There, it is possible to scan the e-card and check the code and to give automatic bill . Here, it is, also, possible to make a statistical sale analysis during the last period, check the warehuose status, warn, in time, to the items that are specially requested with customers or those that are sold. They are connected by central global salesman computer and he always has real information on sale status and supplies. Global production represents communicatinal and timely connection between designers, textile producers, and clothes producers. By selecting the type of fabric, computerised garment manufacturing is started. Through this communication channels, it is possible to start the manufacturing immediately after virtual presentation. Global production is possiblewith so-called satellite factories and intelligent weaving and knitting machines. These are high-speed machines and with possibility of fast shift from one cloth item to another, because they produce only few meters of a certain fabric for one customer. Unique clothes items are prepared according to customer's wishes and measures. Intelligent sewing machines have the possibility to adapt fast because they produce unique models of unique fabrics, so, each apparel is different and sewing parametres are set individually for each piece. The aim of global production and sale is unique production of clothes made by measures and wishes of customers. It is predicted, that, the serial producers will reorient to unique production; this clothes will be more expensive but, its price will cover the costs of modernization.

CIM conception has been entering the textile industry for the last ten years and till toda it has completely recouped constructional preparation and technological process of cutting. Now , CIM conception in the processes of sewing and finishing has been developing.[3]

The existance of integrated CAD/CAM systems within CIM conception obtains increased quality to six times, reliability of production processes to 75%, reduction of production costs to 25% and increasing the ability of the engineers in preparation and analysis from 10 to 35 times.

5. CONCLUSION

In this work technical and technological development of planning production processes in jeans production, it is shown and analysed the part of modern organization including the model of management conditioned by presence of contemporary computer technology.
This would be the reason for a new model of flexibility defined in terms of fast development of technology which clearly results in a model of managing the production with flexible production systems with accent on defining, and, than updating the base of acquirement.
By introducing modern automats to production process, the following expectations have been met:
- production time has been reduced,
- production efficiency has been increased,
- products costs have been reduced,
- the space and energy have been saved,
- the number of employees has been reduced,
- better quality of products.

With the existance of CAD/CAM systems within CIM conception it is obtained: increased quality to six times, reliability production processes to 75%, reduction of costs,etc.
CAD/CAM system and its connection with CIM conception represents significant contribution in researching the development of planning production processes in jeans production, concerning the expansion of jeans production in Novi Pazar and more.
The research has confirmed that there are following advantages of technical and technological development versus classical way of jeans production:
- increased volume of production
- reduced time of production
- growing standards of production quality,
- fast respose to market demands,
- increased availability of data,
- work organization is fast and systematic,
- reduced costs and increased profit.

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THE ASSESSMENT SYSTEMS IN MODERN BUSINESS

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Summary: *This paper presents the development of a computer assisted intelligent assessment system. The system is based on the IMS QTI standard and designed by applying the Model Driven Architecture (MDA) software engineering standards, the artificial intelligence and description logic reasoning techniques based on tableau algorithm. The work, also, shows the using of metamodel transformations between concrete languages, as well as the modeling languages. We propose the framework for assessment system that is reusable, extensible, and facilitates interoperability between its component systems.*

Keywords: *Assessment Systems, Description Logics, Model Driven Architecture, Semantic Web*

1. INTRODUCTION

The assessment is an integral part of any kind of business. In the age of information technology the assessment applies in business processes in the form of assessment systems, actually the assessment systems on Semantic Web. However, in assessment systems the huge possibilities of Semantic Web [1] in the data representation and exchange are limited by the fact that the end user (manager, or employer) still needs to take care of the data. The main problem in creating modern assessment systems on Semantic Web is how to exchange and enrich the knowledge, as well as to provide the way for knowledge evaluation. Whenever the assessment experts exchange assessments electronically, whatever software and hardware systems they use, interoperability enters the scene. Interoperability is the capability of software systems to use the same formats for storing and retrieving information and to provide the same service on different hardware and software platforms [2].
This paper proposes a way to create a flexible, interoperable assessment system that can be easy to maintain and reuse. It is based on the IMS Question and Test Interoperability (QTI) standard [3] and designed using the Model Driven Architecture (MDA) standards [4], that comes from software engineering. The core concept here is to change the system's specification rather than implementation using the Unified Modeling Language [5] as the standardized modeling language that most tools provide support for.
One of the main ideas the paper proposes is using Description Logics (DLs) [6] reasoning techniques for intelligent analysis of students' answers to and solutions of the problems they are working on during assessment sessions with the system. The use of a DL reasoner enables processing of simple choice questions, which is the novelty that can be applied in the IMS QTI standard. Furthermore, this is the way for applying a framework for data sharing and reuse across heterogeneous applications, which is the core of the Semantic Web.
The paper is organized as follows. The next three sections describe the basic notions of the IMS QTI standard , Description Logics and MDA standard, respectively. Section 5 presents the modeling of the QTI-based assessment system using the MDA standards. Section 6 is talking about the reasoning with QTI models. Section 7 describes QTI-FAR – the framework and architecture for assessment systems. The last section shows the conclusions and indicates directions for future work.

2. IMS QTI STANDARD

The IMS QTI standard [3] specifies how to represent question (assessmentItem) and test (assessmentTest) data and the corresponding result reports. These items are the smallest exchangeable assessment object within this specification [3]. An item is more than a 'question' in that it contains the question and instructions of how to be presented, the response processing to be applied to the candidate response(s), and the feedback that may be presented (including hints and solutions).

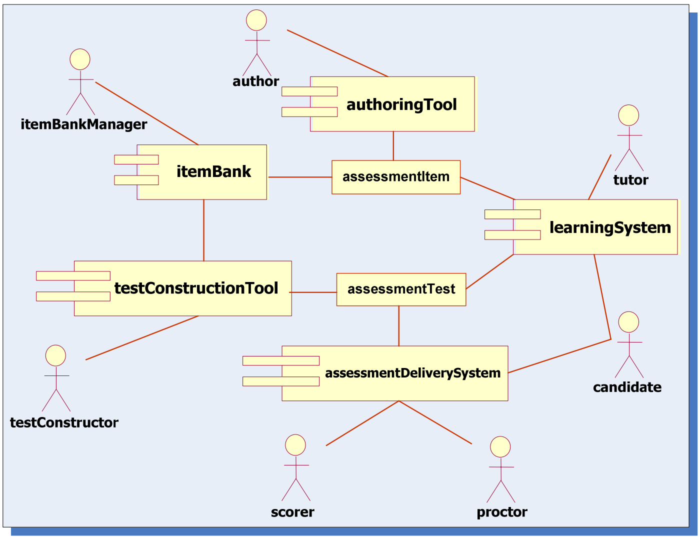

Figure 1: The role of assessment tests and assessment items [3]

There are different forms of items, such as multiple-choice questions or fill-in-the-blank tasks [7]. The presentation provides the structure for defining several possibilities for the same question, in order to be able to present the same question in different ways. Each answer within this question can also have different wordings. The response processing allows the author of a test to predefine how the answers to the test will be evaluated. The results of a test can be expressed using the "result reporting". This definition describes that the results of a test can be recorded so that other systems can make use of it. The feedback component of QTI consists of two types, modal and integrated [3]. Modal feedback is shown to the candidate after the response processing has taken place and before any subsequent attempt or review of the item [3]. Integrated feedback is only shown during subsequent attempts or during review. There is an exchange of items, assessment, and results between authoring tools, item banks, learning systems and assessment delivery systems. For interchange between these systems, an XMI binding is provided [8].

3. DESCRIPTION LOGICS

The basic notions in description logics (DLs) are concepts (unary predicates) and roles (binary predicates) [19]. One of the most important constructive properties of DLs is their reasoning services, which can be used for reasoning with ontologies. Reasoning services in DLs are based on the tableau algorithm [6]. The tableau algorithm tries to prove the satisfiability of concept term C, by demonstrating a model in which C can be satisfied [6]. A tableau is a graph which represents such a model, with nodes corresponding to individuals and edges corresponding to relationships between individuals. New nodes are created according to expansion rules [6]. These rules are different in different description logics. Instance checking technique gives answer weather a given individual is instance (belongs to) of a specified concept [6].

4. MODEL DRIVEN ARCHITECTURE

Model Driven Architecture is defined as a realization of model-driven-engineering principles proposed by Object Management Group (OMG) [9]. This is a software design approach that provides the set of guidelines for structuring specifications expressed as models [10]. MDA defines three view points (levels of abstraction) from which the system can be analyzed. According to [9], there are three models that correspond to these points of view:

- *Computation Independent Model – CIM* doesn't show the details of the system structure and it's very similar to the concept of ontology;
- *Platform Independent Model – PIM* defines the system functionality using an appropriate domain-specific language;
- *Platform Specific Model – PSM* is a system specification that uses concepts and constructs from concrete domain-specific language, or general-purpose language (like Java) that computers can run.

The central concept of the MDA standards is a four-layer modeling architecture (Figure 2).

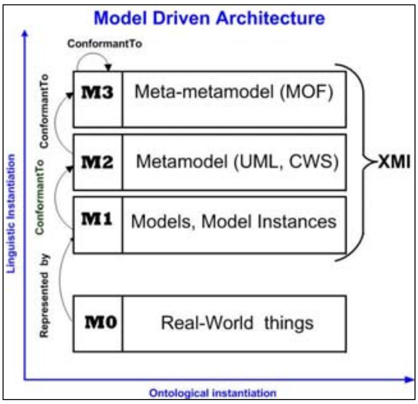

Figure 2: Four-layer architecture of MDA [10]

The topmost layer (M3) is called *meta-meta model* layer and it corresponds to CIM. OMG has defined a standard at this layer – MOF (Meta Object Facility). According to [11], MOF is the language intended for defining meta-models at M2 layer, which corresponds to PIM. The next layer is the model layer (M1) – the layer where we develop real-world models. It corresponds to PSM.

An important, recently defined MOF-based metamodel is the OWL metamodel called the *Ontology Definition Metamodel* (*ODM*) [12]. It covers common concepts of ontological engineering, such as classes, properties, resources, etc. To an extent, it is similar to RDF Schema and OWL languages, commonly used for ontology development. However, since it is MDA- and MOF-based, it has an important advantage of enabling the use of graphical modeling capabilities of the standardized UML modeling language for ontology development.

Model transformation is the process of converting one model to another model of the same system [13]. *Model engineering* uses the terms "representedBy" and "conformantTo" [10] to establish relations between the models in the MDA layers. It is possible to define the transformation of one model into another if the meta-models of different models are made in the same language. This language is defined by the XML Meta-Data Interchange (XMI) standard [8] that defines how XML tags are used to represent serialized MOF-compliant models in XML. MOF-based metamodels are translated to XML Document Type Definitions (DTDs) and models are translated into XML Documents that are consistent with their corresponding DTDs. Using XMI, it is possible to generate a "middleware" environment automatically, as well as to transform a "middleware" platform into another. Automated tools generally perform these translations, for example tools compliant to the OMG standard named QVT [14].

MDA is a very generic framework. A more specific one is a widely used implementation of MDA called *Eclipse Modeling Framework* (*EMF*) [15]. The meta-metamodel of EMF is called *Ecore*. It has started as an implementation of MOF, and has evolved into a meta-metamodel of its own. It essentially represents a simplified implementation of MOF. A well-known EMF-based language for developing model and metamodel transformations is called ATL – Atlas Transformation Language [16].

5. MODELING THE QTI-BASED ASSESSMENT SYSTEM USING MDA STANDARDS

The main reason for applying the MDA standards [4] in development of assessment systems is to make a clear difference between conceptual and concrete modeling, in order to automate transfer and sharing of information and knowledge. The essence of the development of an assessment system based on the IMS QTI standard (the QTI system, for short) using MDA standards is a transformation from the system's platform independent model (PIM) to platform specific model (PSM). In this case, the PSM is generated using Ecore classes of the Eclipse

Modeling Framework (EMF), whereas the transformation from the PIM to the PSM is made using the Atlas Transformation Language (ATL) as the most recent implementation of the QVT standard.

5.1. Creating the QTI Models Based on the QTI Metamodel

The first step in developing a QTI system using the MDA standard is to create a metamodel that captures the main concepts of IMS QTI standard (Figure 1). The details of QTI metamodel are presented in [17].
Having the Ecore-based QTI metamodel that is located at the M2 level of the MDA hierarchy, we can create models that correspond to a given metamodel. There is a lot of examples of *assessmentItems* that are proposed in the IMS QTI standard (see [3]). In order to illustrate the creation of models that correspond to a given QTI metamodel, we present an example the Simple Choice item shown in Figure 3. We have chosen the simplest type of item in the IMS QTI standard in order to present the main idea of this work: applying DL reasoning techniques, based on model transformations, in the response processing (Figure 4). The system expects a single response from the candidate, because only one of the options presented to the candidate is correct.

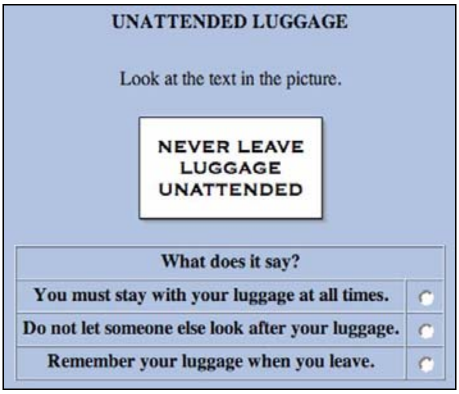

Figure 3: A simple choice item example [3]

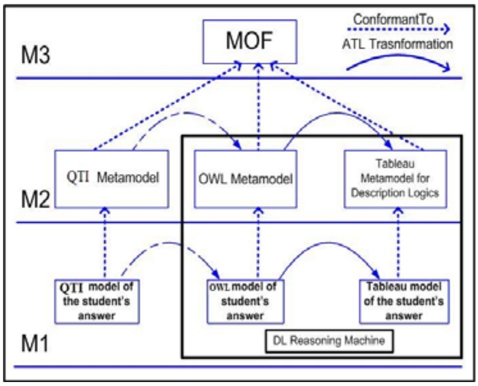

Figure 4: Analysis of Students' Solutions

The Ecore-based model for this example is shown in Figure 5. Response processing in this example is also simple. As shown in Figure 5, the candidate's response is declared on top of the item to be a single identifier. The values this identifier can take are the values of the identifier's attributes corresponding to the individual simpleChoices(ChoiceA, ChoiceB, ChoiceC). The correct answer is included in the *declaration* of the response (Figure 5).
The assessment test example in the figure 6 has three assessment items. The navigation mode is linear, which means that the candidate is restricted to attempt each item in turn, i.e. once the candidate moves on he is not permitted to return. The selection specifies the rules used to select the child elements of a section (in this case two child elements are selected).

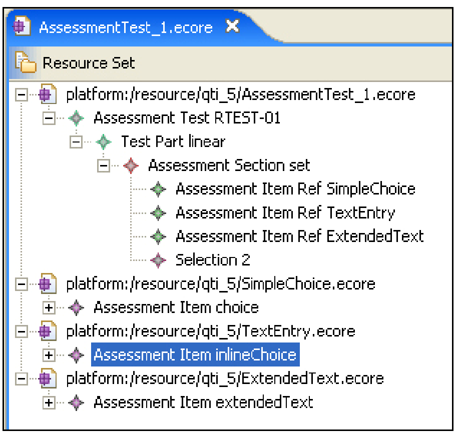

Figure 5: Ecore QTI model for the simple choice item

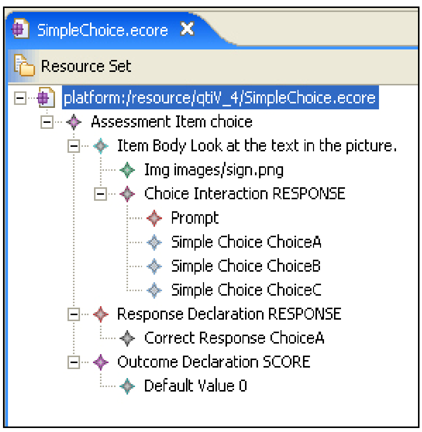

Figure 6: Ecore model of assessment test [26]

5.2. Model Transformation in QTI System

In order to use a DL reasoning techniques in the process of analyzing of students' solutions, it is necessary to perform the transformation the QTI-based models into the equivalent ODM-based QTI-OWL model (Figure 4). This process is automated using the Atlas Transformation Language (ATL). The result of qti2owl.atl transformation is the QTI metamodel as well as the QTI models in Ecore that are OWL based (Figure 7).

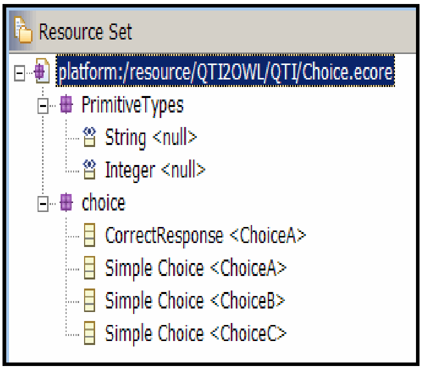

Figure 7: OWL model transformed from QTI model

6. REASONING WITH QTI MODELS

In this section, we focused on the intelligent analysis of the semantics of students' solutions to the problems they solve during assessment (students' solutions, for short). To this end, we examined using a Description Logics (DL) reasoner based on Model Driven Architecture (MDA) software engineering standards. We propose architecture for intelligent analysis of students' solutions (Figure 4). For explanation our idea, we present the using of DL reasoner in analyzing sudent's answer, using simple choice item (Figures 4 and 5).

6.1. DL Reasoning in Inteligent Analysis of student's solutions

Many Semantic Web-based education environments use different reasoning techniques to help the authors make improvements in the course design (e.g. case-based reasoning techniques explained in [20], or rule-based reasoning [21]), or for intelligent analysis of the students' solutions. For example, Simic [21] used an XML format to represent the domain knowledge and generate a CLIPS file (*.clp) before using the reasoning mechanism. The Jess (http://www.jessrules.com/jess/index.shtml) expert system shell's inference engine was used as the reasoning mechanism. However, some problems are difficult for Jess to solve:

1. *reasoning about the course material subsumed by another one (i.e., classification of learning material);*
2. *reasoning about a student's answer which is a model of domain knowledge (in the sense the term "model" is used in DLs);*
3. *intelligent analysis of the semantics of students' solutions.*

Intelligent analysis of students' solutions using a DL reasoner may fulfill the following requirements:

1. check whether the student's answer is satisfiable w.r.t. the question;
2. find the student's mistakes (semantic inconsistencies) in the answer;
3. find if the student's answer can be described with an uncertainty, rather than just as a true answer;
4. use different pedagogical strategies in the analysis of students' solutions, according to a hierarchy of answers.

These requirements may be satisfied using DL reasoning calsulus like classification (subsumption) and consistency. Using some DLs reasoning techniques in this paper, we focus on problem number 1.
Classification is useful in cases of chekcing the hierarchy of students' answers or teaching courses. A question submitted to the student may imply a few different answers, and all of the answers may be true. It case of a few true answers, the reasoner may find the most common answer and give positive (but different) marks to the student. The answer hierarchy can be calculated using the DL subsumption reasoning technique. This classification cannot be applied in cases when there is only one answer for the question.
The benefit of applying consistency is finding (with a DL reasoner) logical mistakes in the students' answers. Some existing DL reasoners [19], [22] may fulfill the above requirements, but there are a few problems of some in their usage in such software environment. The problem is in their architectures. For example, the FACT

reasoner [19], implemented in LISP, is difficult to integrate with ISWBESs. The FACT may check the consistency of some students' answers (if they are submitted as an ontology), but cannot discover inconsistencies precisely.
For intelligent analysis of the semantics of the students' solutions, to fulfill the above mentioned requirements we propose a DL reasoner (Figure 4) that uses MDA model transformation. We assume that the students' answers are submitted to the reasoning machine as OWL models (Figure 4), transformed from a QTI model (Figure 3). OWL model conforms to OWL metamodel, which is defined in Ontology Definition Metamodel (ODM) [12].
The tableau model is described using XML Metadata Interchange. XMI has a tree structure - every tableau model is a tree (graph) [19]. Using the interfaces generated for the tableau metamodel (Ecore classes), we can analyze such a tableau model, i.e. the reasoner can find the student's mistakes and return them to the Assessment Delivery System [3].
To transform OWL models of students' solutions to the corresponding tableau models, we have also used the Atlas Transformation Language (ATL).

7. QTI-FAR - FRAMEWORK AND ARCHITECTURE FOR QTI SYSTEMS

The QTI-FAR reference architecture is shown in Figure 8. The idea is similar to that implemented in the Eclipse platform for software development. There is an architecture called the Eclipse Rich Client Platform (RCP), which allows developers to use the Eclipse architecture to design flexible and extensible applications re-using a lot of already existing functionality and coding patterns inherent in Eclipse. For more information about Eclipse RCP see [24].
The core part of a QTI system is its *Delivery Engine*, which is a part of assessmentDeliverySystem [25]. All other parts can be developed as plug-ins, associated with the core by a corresponding manifest file and the metadata. The manifest must contain a separate resource describing the plug-in. The metadata associated with a specific plug-in should conform to the model specified by using the QTI metamodel.

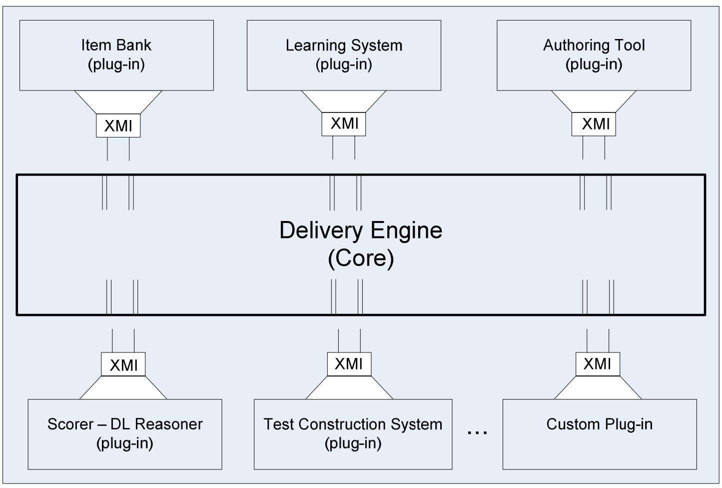

Figure 8: QTI-FAR reference architecture [25]

The Delivery Engine plays the role of a coordinator in the process of analyzing the students' solutions in a QTI system. This means that the assessment items from one subsystem (Figure 8) have to be delivered to the Delivery Engine before transferring them to another subsystem, because every subsystem needs the assessment item in a specific form. This is necessary for the subsystem in order to process the assessment item in its own way, unknown to the Delivery Engine. This form is defined in the metadata of the specific subsystem.
An important part of this system is the *response-processing machine*, as a part of the Delivery Engine. The response-processing machine plays an essential role in the process of creating the questions, as well as in processing the students' answers.

For the purpose of this work a QTI-FAR system prototype in the domain of driving licensing management has been implemented. The system corresponds of the delivery engine and test construction tool as a plug-in and the screenshots are shown in the Figures 9 and 10.

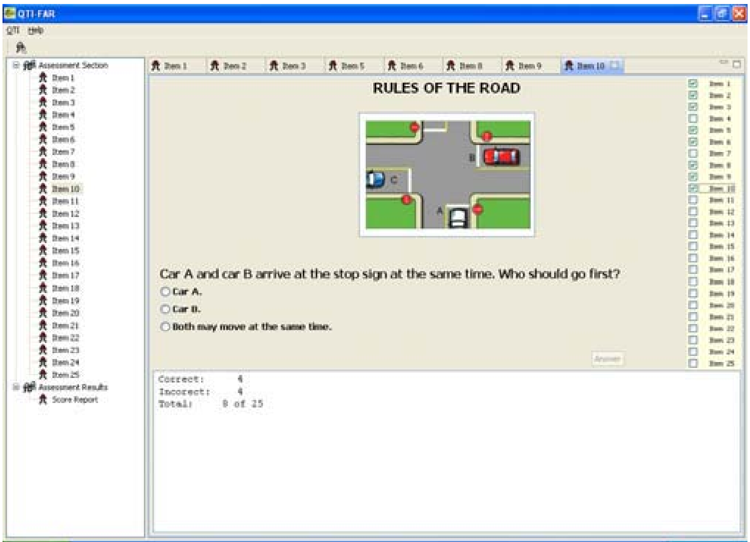

Figure 9: An example of simple choice question in a QTI-FAR-based assessment system

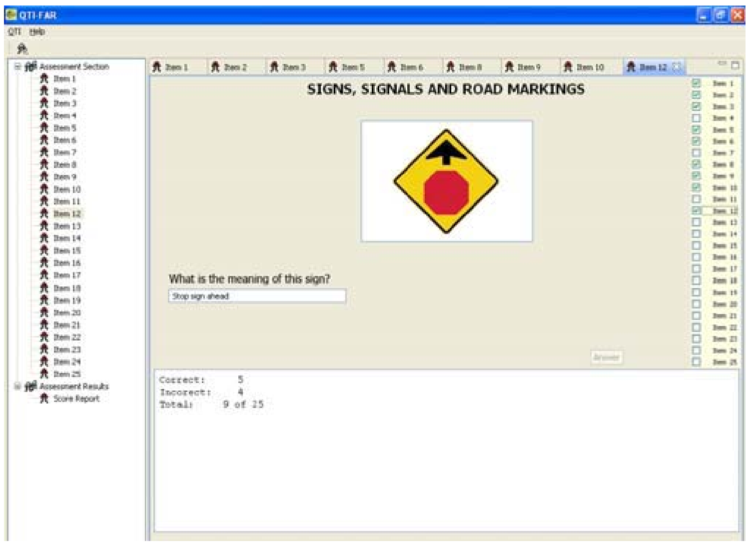

Figure 10. An example of open-ended question in a QTI-FAR-based assessment system

8. CONCLUSIONS AND FUTURE WORK

The main idea proposed in this paper is how Semantic Web (SW) based knowledge representation and Model Driven Architecture (MDA) can be brought close together in designing assessment systems. The paper also describes how to use main power on SW based on DL reasoning techniques in intelligent analysis of the students' solutions. Analysis of the semantics of the student's answer is the key for providing the response processing of open-ended questions (simple choice) in the IMS QTI standard. Proposed way for realization of that idea is the applying of QTI-FAR reference architecture in the assessment systems.

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FINANCIAL INFORMATION SYSTEMS

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1. INFORMATION SYSTEMS: CONCEPTS AND DEFINITIONS

Information system (IS) collects, processes, stores, analyzes and spread information for specific needs. As well as any other system, and information system includes entering (data, instructions) and outputs (reports, calculations). He uses computer technology and processes to enter, and then the results sent to users or other systems. The information system can be switched on and the feedback mechanism.

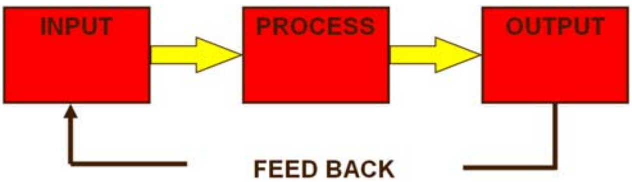

Figure 1. Shematic preview of a system

1.1. Formal and informal information system

Information system can be **formal** and **informal**. Formal information system includes exactly defined procedure of standard entrances and exits and fixed definitions. The accounting system of a company is a formal information system, which processes financial transactions. Informal systems can be of different forms ranging from network rumor within a company, to a group of friends who share documents electronically.
Computer-based information system, CBIS is a system that uses computer technology that made some, or even all of your tasks. Such a system for your needs can use one PC, or several thousands of computers of different capacity, each connected network, with access to numerous databases. In most cases, information systems have the active participation of people in their functioning.

- **Hardware** is a set of devices such as processor, monitor, keyboard and printer. Together, they serve in the process of accepting data and information in their processing and presentation.
- **Software** represents a set of programs that allow hardware to process the necessary data.
- **Database** is a collection of files, tables and their mutual connection is needed for data storage.
- **Network** with a system which performs the connection and sharing of resources of different computers that participate in the information system.
- **Procedures** are a set of instructions on how to use the individual components of IS in order to process information and to obtain the desired results.
- **People** are those individuals who work with the system, communicate with him or use his results.

Computers provide fast and efficient way of processing data, and they are a necessary part of every information system. One IS, however, in itself includes much more than computers. Successful implementation of IS requires an understanding of the process and the environment in which to place the IS. For example, to build that deals with the process of IS sales in a shop, it is necessary to understand the procedures related to procurement and sale of goods, its storage and supplying to the store. In learning about information systems, it is not enough to learn about computers. Computer is only part of a complex system that must plan, execute properly and then maintain. Shown in Figure 2 is a possible environment of a system

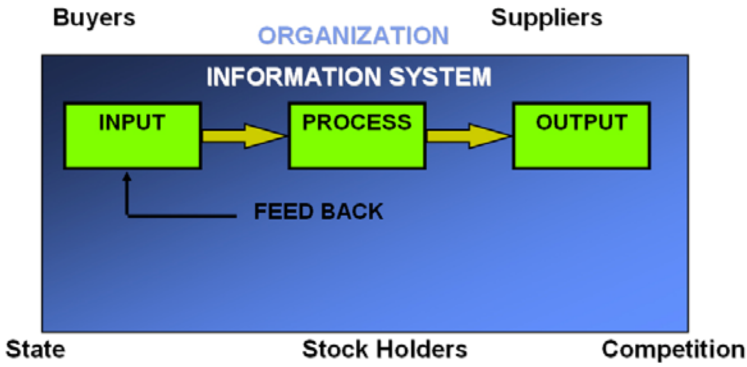

Figure 2: Environment of an information system

Millions of different information systems are in use throughout the world. Areas in which the IS use are different from accounting, management and production, through marketing, human resources, finance, sales and many other.
Let's observe a notional information system of the company which is engaged in selling shoes. Financial management of such companies is a complex process. Data on sales obtained from the sales terminal. These data are, together with data from the warehouse (which is modified automatically when you make sales of products), sent to the central database. With the help of IS facilitated the generation of various reports and enabled faster and more efficient management of the company.
So, we say that the composition of each system the same: each IS contains the hardware, software, data, procedures, network and people. Next possible component of the information system is one or smaller information systems. Information systems that contain less systems are typical for large companies. So, for example, information system of the company Nike has thousands of smaller information systems, which are called "applications".

1.2. Data, information and knowledge

Information systems are created to facilitate and expedite business processes and to achieve the objectives. One of the primary goals is to process data into information or knowledge. In that sense, we'll give the definition of the following concepts:
- Data is a basic description of things, events, activities and transactions. Can be a number, letter, special character, image, or sound. Can be rating the student received on the exam or the number of hours training for a subject. The database consists of large amounts of data organized for search
- Information is data organized so that it has a specific meaning and value to users. The user interprets the meaning and makes conclusions based on the data. Data is usually converted to information based on the application.
- Knowledge consists of data and / or information that is organized and processed to help understanding, the acquisition of experience and different expertise that can be applied to solving the problem.

Information and knowledge can and entrances and exits for the information system. Thus, for example, information about the employee such as hours of work and projects on which work can enter the system for calculating salaries of certain. The system of calculation of salaries can be later used as input for another system of budget preparation.

2. CLASSIFICATION AND EVOLUTION OF INFORMATION SYSTEMS

Information systems can be classified by organizational level and by type of support they offer.

2.1. Classification by organizational level

Companies are made of components such as departments, parts and work units, arranged in hierarchical levels. While some organizations make their restructuring in some of the innovative ways, the large majority of today's organization has retained the traditional hierarchical structure. So today we can find the information systems designed exclusively for the administration, to departments, for departments, units of labor, and even for a single worker. Such systems can be independent, but are usually related.

Typical information systems that follow the organizational structure are: functional (for the level of a department), IS for the entire organization and internal organization. These systems are organized in hierarchies in which each system at a higher level consists of several systems with lower levels, as shown in the Figure 3. As can be seen from the image, the system supports a specific functional area in each company (marketing, personnel, etc.). At the higher level of the whole of IS, IS A inter connects different companies.

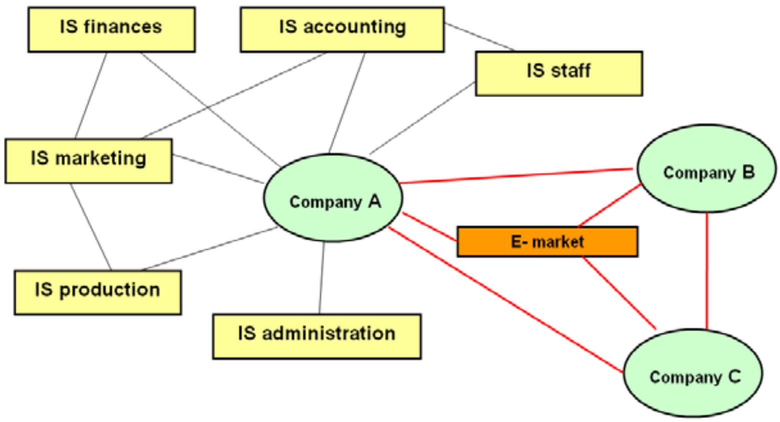

Figure 3: Types of information systems to organizational level

Functional information systems. The main functional information systems are organized for the needs of the traditional departments in the company: production, accounting, finance, marketing and staff.
IS of the whole company. While the functional IS focused on a specific area, meet the needs of drug is more departments, or even the whole organization. This information system along with functional information system IS make the whole company. One of the most important information of this type is the enterprise resources planning (ERP), which allows companies to plan and manage resources of the whole.
Internal organizational systems. Some information systems connect two or more organizations. They are known as inter systems. For example, the system for the reservation of tickets is made up of different systems that belong to different aviation companies.

2.2. Classification of IS on the basis of type of support

Another way of classifying information system is based on the type of support they provide, regardless of functional area. Thus, for example, a system can be used for work purposes in almost every area.

2.3. The evolution of the system support

The first application of computers in business was the business of processing large amounts of data. Computers are gathered to perform monotonous operations and organizing the transactions in the accounting and finance. Such systems are, in general, call systems for transaction processing (TPS). As the time increased the possibility computer, developed a new type of information system, the so-called. Management Information Systems (MIS). These systems access, organize, and display summarizes the information needed to help making business decisions. Also, developed systems are to support office operations (OAS), such as word-processing system or a system for working with tables. Further decline in prices of computers connected with all their higher power, contributed to the implementation of computers in a number of areas in which up to then not use computers. Decision support systems, DSS are developed in order to provide computer support for the adoption of complex, non routine decision. Micro-computer revolution, which began around 1980 year, led to the phenomenon that every analyst, manager and any other professionals, can use your desk-top computer. This led to the division of the system for decision support in two directions: those that are applied managers (executive support systems, ESS), which are applied and people who have worked in groups (group support systems, GSS).
Soon there is the need in the implementation of intelligent computer in solving problems, and appear intelligent support systems (ISS). Here include expert systems (EC), which on the basis of collected knowledge of experts in certain fields, allows people who are not experts to come to solutions of certain problems.

2.4. How information systems support organizational activities

Following ways for classifying information systems is according to the nature of activities that support. Activities may be operational, managerial or strategic, as well as narrowly professional.
Operational activities include operations that are repeated from day to day, such as employees sign when entering the business, or order goods. Operational activities are usually short, the usual daily activities. Information systems that support them are usually TPS, MIS and OAS. Management activities, known as tactical activities or decisions, are the middle management activities, such as short-term planning, organizing and planning. For the implementation of these activities are used management information systems (MIS), as they are designed for summing data and prepare reports. Strategic activities are activities that are drastically different depending on the type of job. Traditionally, activities include long-term strategic planning. Example of strategic activities would be presenting new products, or complete relocation of business activities in another country. Long-term planning usually prepares strategy and plans for the next five to ten years. On the basis of such plans, the company created the appropriate short-term plans. In Figure 4 we can see the types of information depending on the activities that support, as well as people who use certain information systems. So we can see that the top management of the company uses information systems that carry out strategic activities, and middle management use information control systems.

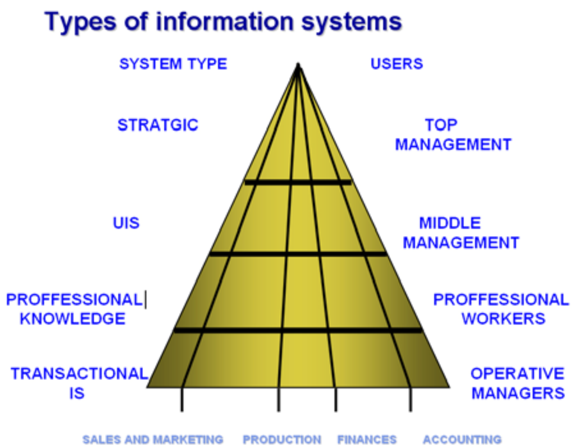

Figure 4: Types of information systems

In Figure 4 we can see and professional workers, such as, for example, financial and marketing analysts. They are classified as workers with the knowledge (eng. knowledge workers). These are the people who create information and knowledge and integrate it into the business. Workers with the knowledge for example: engineers, developers, lawyers, various analysts and others. They are therefore responsible for finding and developing new knowledge for the organization and its integration into the existing knowledge. Therefore must be made in all the trends and innovations related to their profession. In developed countries, with the knowledge workers are 60% to 80% of the total number of employees. Information systems that use workers with the knowledge of the range of Internet search engines (that support this type of workers to find information) and expert system (to help in the interpretation of information found), to different CAD programs (that accelerate the design process) and a sophisticated system with work with the database (which help to increase productivity and quality of work). The next big class of employees is civil servants who support managers at all levels. Special group of officials, using, processing, and broader data called workers to the data (including answering and other office officials). They perform the work in the various operational activities and in the use of information systems for transaction processing, office automation and other business information systems that assist them in carrying out daily activities.

3. DESIGN AND DEVELOPMENT OF INFORMATION SYSTEM

When it's made strategic decisions about the design of information systems, it is started from its design. Traditional method applied in the development of information system of the company is called the life cycle in the development of information systems. There are eight sequential process during which the developing system. As can be seen in Figure 5, these processes include: research, analysis, design, programming, testing, implementation, commissioning and maintenance work. Each process is composed of exactly defined tasks. Large projects usually require the execution of all tasks, while a smaller development projects usually require the execution of only one part of the task. On the development of information systems involved, the development team. In it are usually included users, system analysts, programmers and technical experts. Users are employees from all functional areas and levels of the organization, which will use the system, the direct or indirect way. System analysts are informatics professionals, who have specialized in analyzing and designing information systems. Developers are informatics professionals, who write new or modify existing computer programs to meet user requirements. Technical experts are specialists in certain computer areas (such as databases or telecommunications), that their knowledge of participating in the development of information systems.

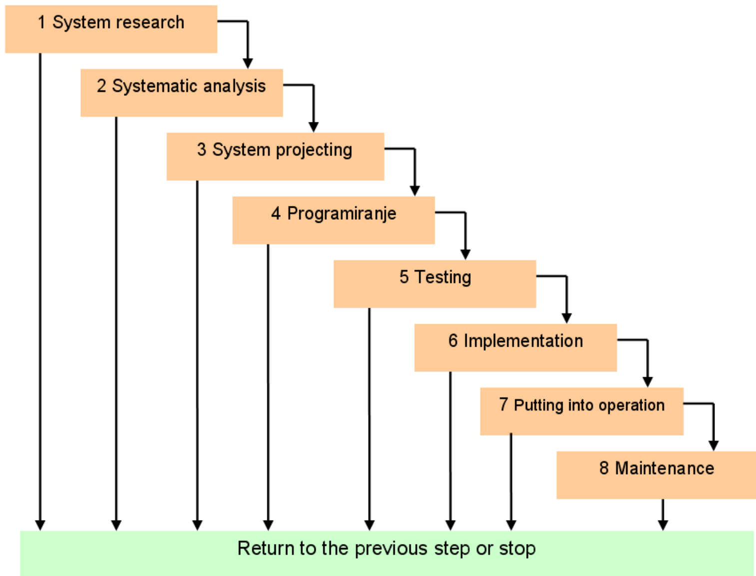

Figure 5: Eight phases of the development life cycle system

4. CONCLUSION

Increased competition, financial market instability and insecurity, imposed as an imperative constantly reducing the cost of doing business, and increase productivity and efficiency. Output is required in different inovative content and appropriate technological solutions. Larger competitions can be achieved by introduction of quality management, reengineering business processes, but many activities and business activities, it is necessary to build from the beginning on a different basis, adjusted new order of things and the fact that the application of modern operations crucial new information and telecommunication technology. New technologies influence the creation of the new economy, and the new economy is always "hungry" new technologies.

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CORPORATE RESPONSIBILITY AND BUSINESS ETHICS IN SERBIA IN THE ERA OF INFORMATION TECHNOLOGY

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***Summary**: The experiences of developed countries have shown and proved that the implementation of the concept of corporate social responsibility and business ethics is useful and that in the long term it brings a dynamic level of growth and development of society and companies. Economic development in these countries is the result of good management, which is natural, if you bear in mind that the successful practical application of management was demonstrated in the first half of the last century. It appears that the power of management was increased by the use of new technologies and that it is impossible to be successful without its use. In conditions of increased competitiveness and greater application of information technology, there is a threat to the business to be left without man, i.e. responsibility and ethics, as instruments for the achievement of business success in the long term. This threat is more objective in the transition countries, because survival is endangered, as the most important goal of every individual and organization. This paper has ambitions to point out the issue of corporate social responsibility and business ethics in Serbia in the increased sophistication and offer solutions to its resolution.*

***Key words**: corporate management, social responsibility, business ethics, information age*

1. INTRODUCTION

For a long time in business, social responsibility and business ethics were opposed to the phenomenon of corporate business performance. Classical organization and management believed that corporate social responsibility as a phenomenon was impossible and that the only responsibility the management should have is one that stems from the company. According to this understanding, to insist on expanding corporate responsibilities outside the company brings into question the relationship of management to shareholders that who entrusted the management of their company. In such circumstances, there is a possibility of conflict between corporate and the general social interest.
The based of this conflict are the interests of constituents who directly or indirectly participate in the organization, such as employees, customers, suppliers, distributors, creditors, local government, etc. However, it seems that compromise solution is the best, i.e. it is necessary that corporate management takes into account profitability, but also ethics, or the manner in which the profit is realized. The dilemma occurs in the process of decision-making, and how to find a balance between corporate benefits and social activities, i.e. to decide what is right, honest and fair as the solution of business problems. This dilemma particularly gains importance in the conditions of a high level of IT sophistication and increased turbulence in Serbia, as a country in transition.
To provide adequate answers to new challenges of corporate management in terms of dramatic competition, it is necessary to understand that corporate social responsibility and business ethics do not exclude business performance. Therefore, the general hypothesis is that business performance in the information era, in the long run, can be more efficiently and effectively achieved if instruments of business ethics and social responsibility are implemented and that information technology facilitates the achievement of defined goals. In short, it is possible to be profitable, or have money and preserve corporate moral credibility.
For Serbia, a country in transition, it is important to remove the ideological misconceptions that still exist, when capitalist or market economy is concerned. In fact, many believe "that the capitalist business world is a kind of jungle in which only the most capable (competitive) can survive. In that light, ethics is very far from moral action in other parts of human life. As one American writer stated, socially responsible and ethical business ethics is poker, and in poker bluffing and cheating are allowed" [1].

The aforementioned points out that no absolute social responsibility and ethics and that every society, and Serbia as well, or any corporation should determine their system of values and moral rules by which to achieve them, and on the basis of them to evaluate the level of implementation.
One should bear in mind that Serbia used to be a leader in the practical operationalization of social responsibility in the self-management of socio economic relations and that, due to the operationalization, one good idea was brought into question. A deeper analysis shows that what the developed world today has to say on the issue of social responsibility, in Serbia it had practically worked for two decades of the last century. During the self-management organization, there was a high level of socialization of society, which had a positive impact on the social and economic development. The data show that in former Yugoslavia, in the seventies, the realized GDP had a double figure growth rate, and had the highest growth dynamics.
However, the nineties of the last century in Yugoslavia, and consequently in Serbia, have abandoned the concept of self-governing organization, and the market concept of the developed countries from the seventies was introduced. Thus the social state disappeared, and a society that showed high potential for achieving success, and a number of problems came with it, which became more complicated and numerous. At the same time, developed countries have started to promote the concept of social responsibility and to study the Yugoslav practice of self-management organization, with the intention to implement some of these experiences into their corporate practice.
Practice has shown, that to insist on, or mention the practice of social state and society in the current Serbian social and economic milieu one is faced with resistance, presenting them in a negative context, and even as the main culprits of all problems, which suggests a need for a broader explanation.

2. TOPICAL QUESTIONS ON CORPORATE SOCIAL RESPONSIBILITY AND BUSINESS ETHICS IN SERBIA

A precise analysis of Serbian social and economic scene shows that social responsibility and business ethics have not been implemented into business practice. The reasons are numerous, and the key is economic failure and lack of large and strong organizations that would, in the conditions of a weakened state, be able to solve the problem. In Serbia, there was a paradox that citizens, through monopoly, fiscal and other unreasonable taxes, supported a non-productive state, which excludes the possibility that the state, and business systems participate in solving local or wider problem.
Analyses show that on this issue there was no wider research on the basis of which conclusions could be deduced, on which level of development and the applicability of the concept of corporate management is, and especially corporate social responsibility and business ethics. Of course, Croatia made great empirical research on the management and related phenomena. [2] In addition to a number of conclusions, the research has shown that of the first five undesirable traits of managers in Croatia, dishonesty takes the first place at all hierarchical levels of management. Behind this tendency are gossip, lack of ethics, and partiality. At the same time, subjects believed that honesty was the most important moral characteristic, especially for middle management, and found that characteristic is lacking in the business world.
Bearing in mind the similarity in the business and cultural sociological being of business people in Serbia and Croatia, and that both countries for several decades lived in the same political and legal environment, and that they are in the process of transition, the conclusion about the social (ir)responsibility, business ethics and honesty could be more or less accepted in Serbia. Accordingly, it should be kept in mind that fairness and social responsibility in business are much more than the usual questions and problems that appear in business and life in general.
However, monopolies, bribes, corruption, irresponsibility, etc. are just some of the elements of unethical procedures and behavior. However, in the information there have emerged new, sophisticated and unethical issues in which cyber crime, and endangering privacy, personal identity theft, internet fraud, take more and more attention of different social structures, such as legal, police, cultural social, ethical, etc. Accordingly, it can be discussed about a new type or the modalities of corporate responsibility and business ethics, called Internet ethics. Its task in the era of information would be related to the diagnosis of a more complex disturbed system of social values. In such a situation, one should be reminded that conclusion of Kant that the basic condition to talk about irresponsibility and unethical behavior is that immoral actions are rare and often exclude themselves. So in the information society, the current tendency will be more prominent, which is converted a law, which means that to talk about immoral actions, it makes sense only if you are the one in the majority of population who do not practice them. In other words, to talk about lying, stealing, fraud and other immoral phenomena, it makes sense only if most people do not deceive, do not steal or are not engaged in fraud. If you all steal, all are subject of bribery, corruption, irresponsibility etc., everyone will be right. This conclusion is natural, because if most people behave so, then it is adopted the as a value system in which insistence on morality, responsibility, etc.

have little worth, and will often encounter great resistance. In that sense, nothing will change even in the information era.
Every society and organization works in order to create a social, corporately responsible and on ethical grounds based policy. The aim of policy is the alignment of corporate activities with the expectations of interest groups that are related to the company or corporation. This means that corporate management must take into account: the owners, employees, suppliers, customers - consumers, competitors, investors, domestic and foreign governments, associations for the protection of the environment, consumers, etc. In this way it enables the present, and future through the so-called sustainable development. Sustainable development is actually "the creation of a sustainable future in the economic, social and environmental spheres.” Corporate responsibility extends to the policies of investment, creation of joint profits, a common policy for improving the working and living space, etc., which is the basis of the holistic concept.
In addition, each state must define what is "fair", what is “good and bad”, "moral and immoral”, in order to bring about, on the basis of defined criteria, the moral or irresponsible behavior of individuals, or organizations towards other people, corporations or state, or other constituents that are related to the company. These beliefs reflect the feeling of obligation to other people, feeling that it is better to help another person than hurt him. So we get an established system of values in which people are mutually helpful, which provides additional effects, which would not be able to achieve by partial, or individual action.
Information technology will increase the sustainability of the system, because it enables faster collection, selection and analysis of data and transforming the information as a basic component in the process of making managerial decisions. By connecting a large number of networks-of-networks, not only do the sectoral borders in a company disappear, but also the border between the organization and corporate environment. This fact is indisputable, because the employees are members of certain companies, but at the same time, they are members of local government in which the company operates. If employees have interests in establishing a company, they will thus contribute to the stability of the environment in which they live. And vice versa.
Information technology will affect the reduction of the concentration of employees in business systems. This happens and will happen by improving functional aspects of the development of new technologies. This influence should be viewed in more directions, but two are dominant.
First, by reducing the number of workers in the organizations, due to increased organic composition of capital, and introduction of information technology, robots and other machines. Deconcetration of human work creates the conditions to be unmass corporate social responsibility and business ethics, and that these phenomena are observed at the level of the individual, not mass, as is done in the classical organization and management. In such circumstances, the emphasis will be on the individual when it comes to employees, customers, suppliers, etc.
On the other hand, information technology has created the conditions for the company employees to perform tasks from their apartments, and armchair. In a large number of service companies, it has been largely implemented. Occasional and temporary employment was introduced. Great American retail giant Wall-Mart, as well as Marx and Spencer in the UK, have been doing this for several years, while occasionally retailers are employed to give services to customers in the so-called "tips." [3] Numerous service companies, agencies, and consulting houses have been practicing Internet communication and business. The American publishing house "Amazon" every year increases electronic book sales, so that the traffic of Internet sales surpassed the traditional way of selling.
In such circumstances, direct contacts between corporate management and employees will be reduced, and "intolerance" between management and employees, that are related to the unethical actions or discrimination on various grounds, which have produced a number of irresponsible and unethical practices and behavior of corporate management.
However, the practice shows that in the information society, it is not impossible that someone gets injured, or fully satisfied, especially when it comes to the actions of management. So, on the Internet and in Internet ethics of responsibility, there is no absolute fairness, accountability and ethics, nor there can be. This is because business involves different groups of managers at different levels and functions, and other constituents, in the basis of which is interest. Regarding the employees, it is about the employees with different knowledge, skills and abilities, different social groups and etc. The situation is similar with other entities in the marketing channels, as wall as local governments and other stakeholders.
This points out that there are many dilemmas when it comes to corporate social responsibility and business ethics in which is not possible to give a simple answer to the question of what is socially responsible and irresponsible, ethical and unethical. But, one thing is certain, and that is that social responsibility and ethical work pay, and that it is good to be responsible and ethical in corporate business. Research confirmed that "investors are willing to invest in a socially responsible company even with 20% more expensive payment shares, that in the socially irresponsible companies." [4]

3. CORPORATE SOCIAL RESPONSIBILITY AND BUSINESS ETHICS IN SERBIA

It should be said that Serbia realized the need for responsibility and ethics 120 years ago, so one hundred years before in the Netherlands the first Chair for the business ethics of the high school in Nijenrode was established. In this time, a special attention was paid to state enterprises, which had been regulated by legal regulations, and ethical standards. A large number of craft, trade, banking and other organizations had arranged the rules of functioning, and some their own code of conduct.

In the seventies of the last century in former Yugoslavia a concept of self-management was introduced, based on social ownership and self-organizing. The idea of the French Utopian socialists Saint Simon, that: "Management of people needs to be replaced with the management of things", through regulations, or through the Constitution and the Law on joint work (ZUR) received its first basis for practical action. In this way it happened for the first time in civilization that those who created the effect actually participated in decision-making, and had a crucial role and influence on how it will distribute among the participants. This is undoubtedly a great progress in relation to antagonism that existed between those who create effects and owners who had a decisive influence on the distribution. This showed that responsibility manifested itself primarily in the sphere of distribution.

Analysis showed that in the period of self-management there was significant progress in the establishment of corporate social responsibility, and socialization of organization, especially when it comes to the sphere of distribution, where the famous theorist of business ethics, R. George says: "Workers' self-management was the experiment that was carried out with certain success in former Yugoslavia. Other forms of his successfully applied in Sweden. Several experiments, such as informing employees on the entire business operations and the use of teams instead of individuals for work in production, also have proven somewhat successful and deserve a careful study as a model of future development."[5] Social responsibility in this period was on the working people, who decided on their fate, or the part which should be taken for social needs of different areas (health, education, culture, humanitarian funds, various forms of solidarity help, etc.). Therefore, in this political and economic structure there was a high level of ethical responsibility, so that immoral actions and procedures rarely appeared, which later became many and various.

There have been some twenty years since self-management was abandoned. Some developed countries in Europe are returning to the participation model of decision making and management of company (Sweden, Germany, Japan), and Serbia left the practice and returned in the second half of last century to the so-called competitive management capitalism (USA), or personal capitalism in Germany. Also, in the organizational sense, thanks to information technology, there was a reduction of the gap between the top and the bottom of the pyramid, seeking to reduce or eliminate hierarchical power as its traditional base, and introduce the participation of employees in the interest of important decision-making. Serbia is going back there where the other have left or intend to leave. The reason is simple and can be seen that the very organization of socialization is usually more responsible and more ethical and successful in comparison to the traditional organization in which there are opposed interests. Therefore, classical organizations are potentially the source of the conflict, and immoral procedures and actions, which reduces the performance of business.

Bearing in mind this tendency, the experiences gained in the self-management socialist society can be a comparative advantage, especially in the current organization in Serbia and a large number of people are employed who experienced the practice of social responsibility.

3.1. Measures which should be taken in Serbia to improve corporate social responsibility and ethics

Corporate social responsibility in Serbia at the beginning of the third millennium sprang from the established (ir)responsibility on the macro, or the state level. As the level of responsibility can not be positively assessed, it is clear that we cannot talk about any corporate social responsibility and business ethics as a positive state and a trend in the corporate or individual level.

This statement is important, because it shows that the first condition for solving certain problems is to acknowledge that the problem exists. If you ignore the problems, their solution is prolonged or left for other political options, and corporate management in the future, social, economic, legal and moral problems and dilemmas that not only will not solve, but will increase, and thus endanger their own survival. The second question that should be answered is whether Serbia has a need for the introduction of corporate social responsibility and business ethics. The third issue relates to the proposed measures which should be taken in order to establish social responsibility and business ethics on a higher level of implementation, i.e. the state, but also on the corporate and individual level.

The question of all questions when taking the appropriate measures to raise the level of corporate management and corporative social responsibility is whether Serbia has a need for introducing this system of values, then, which system of values to accept in order to further define the strategy of the improvement of the current state and the introduction of the concept of corporate management, which works in the developed countries.

Some would say that these questions are pointless. However, when it comes to Serbia, they require a precise answer, because it shows that many obsolete traditional values have taken deep roots, and on the other side, many new civilization and European values are not accepted, or it is done under great pressure from the international community.
However, regardless of the above, it can be noted that Serbia, like other countries in transition, has needs for the application of the experience of developed market countries on the issue of social responsibility and ethics in all spheres of economy and society.

3.2. Immanence of the introduction of European system of corporate responsibilities and business ethics

Business ethics is actually applied ethics which deals with the moral righteousness of business procedures. Corporate social responsibility deals with the moral aspect of a company. However, corporate responsibility and business ethics do not spring from vacuum, but come from something and serve something. When the listed phenomena are concerned, it should be said that Serbian business ethics and corporative responsibility which springs from it should primarily rely on Europe and its system of values and culture.
This is important, because Serbia is located in Europe and belongs to the European culture and civilization, with which it shares certain social values which spring from the European business ethics. Accordingly, corporate responsibility today, and in the future, must be directed towards Europe.
It is evident that the EU legislative system is being mentioned more and more, its system security, ecological and other problems of European countries, which implies that between these and other economic, legal, cultural and other systems there exist certain differences. Analyses show that European business ethics and social responsibility have certain specificities in relation to business ethics and social responsibility in the USA, UK, and especially in comparison to Asian and other countries.
Basic difference between the European and the American and British business ethics and social responsibilities is that the European aspect is focused on broader context, i.e. environment, which means on the cultural, legislative, political and social aspect. This means that in practice much attention is paid on permanent contacts and negotiations with various stakeholders to adopt balanced decisions in which all constituents are satisfied. In Europe, there are no extremes in which some constituents drastically profit, and others lose. This means that a lot of attention is paid to permanent contacts and negotiations among stakeholders, as a result of European traditional legal heritage, but partially from the culture of dialogue and negotiations in relation to the American and British practice. It is started from the attitude that the chain is as strong as its weakest link can endure. Therefore European Union, through legislative, i.e. ethical system strives to balance interests, procedures and processes.
In the case of American, i.e. English culture and ethics there exist radical approaches in which some constituents can gain, and others radically lose. (For example, the solution of the Kosovo problem shows that. The solution of this problem has its historical, legal and ethical aspects. During the well-known Kosovo status negotiations, the USA confirmed the listed statements and through Ahtisaari's proposal offered Kosovo to the Albanians so that Serbia in that case became a loser, but also a completely subdued country.) Accordingly, legal and ethical practice produces winners and losers. Therefore, the stakeholders in these societies much less meet at negotiation tables, and more in courtrooms. Simply, the European business ethics is focused on the aggregation of responsibility in a community, i.e. family, companies and society, while in the USA there is individual responsibility. This has serious implications and corporate social responsibility and business ethics, especially in achieving satisfaction of all interest groups.
In that way, Serbia, like other countries, will receive a proprietary concept which showed its advantages u the developed countries. It was expected that privatization would solve all the problems and it needs to be finished as soon as possible. (According to the legal framework, privatization process in Serbia should be completed by the end of 2008 However, having in mind that this process was postponed many times, it is difficult to expect that it will finish in 2009, especially when it comes to the public companies, which represent a significant source of income to the political elite in power).

3. 3. The necessity of the elimination of ideological management

Corporate social responsibility and business ethics are in close connection with professionalization. It turns out that unprofessional management is usually immoral, and that professional management u in the current conditions is more accountable. The reason is that business ethics is studied at high business schools and that in the management process ethically acceptable principles must be incorporated.
The state in the corporal and business sector in Serbia can be partially evaluated through management structure. Precise analyses show that non-professionalism and immorality in the management sphere in Serbia at the beginning of the third millennium have reached their peak. Here, management is rather misused than put in the function of improved performance of organizations which managed because it turned out that ideological

management produces irresponsibility and unethical behavior in corporate business. Of course, political or management becomes the basic generator of business irresponsibility and immorality.
Namely, the tasks of the management of organizational systems were taken by the state, by state officials, who were promoted directors and were members certain political ideological elite. So, there occurred a high level amateurism, voluntarism, politics and the forcing political eligibility, which is essentially a negation of professionalism in the management of organizations, but also a negation of morality and social responsibility of the political elite which citizens have selected.
The results of denying professionalization and giving advantage to ideology and the so-called political eligibility were well-known in the earlier periods of the development of Serbia. However, it was never as prominent as in the last few years. There was a feudalism of management in all segments of economy and society i.e.: state organs, organizations and institutions and management teams which manage public enterprises, in the public sector (healthcare, education, culture, etc.), to state organizations and organs, like army, police, etc. This led that on the corporate level there is no unique philosophy, policy and strategy which would articulate common interests, i.e. which, on the level of the state, or corporations give best effects. Having in mind that management consists of a team of people selected by political affiliation and political eligibility, each member wants to get all the possible privileges for his ideological option. The members of management teams remain in corporate elite, as long as they provide privileges and finances for their political option. When they are no able to provide sufficient privileges, they are rotated with others who are able to meet the expectations and provide additional benefits to the party authorities. [6]
To this, we should add the feudalization of administrative boards, as traditional bodies of management. Namely, administrative boards of public corporations, state institutions and other institutions are also comprised by ideological criteria, so that there is no unity of attitudes, but conflict of interests. Simply, the state from Parliament and the proportions achieved on elections were transferred to corporations, while knowledge, ability and experience of these people was not taken into consideration. This is further manifested on the conflict of coming to managerial decisions when it comes to privatization, modernization etc., which led to numerous affairs that are associated with immoral behavior and procedures, approved by state institutions.
In these circumstances, we cannot speak about management, as a highly professionalized concept, or about corporate social responsibility. On the contrary, we are presented with a highest level of corporate irresponsibility and immorality in all elements of the management process, or u certain functional areas, such as staffing, finances, development, etc.

3.4. The necessity of internet management

With the elimination of ideological management in Serbia, conditions for the introduction of internet management would be made, as a new managerial paradigm, or business concept. The basis of this new concept would consist of IT and communications. With the introduction of internet management there would be dramatic and radical changes in different parts organizations.
It is based on a completely different design of organizations, but also on the necessity of the redesign of managerial process, in which the classic concepts of organization and management would be abandoned. Internet management implies the management of companies using contemporary information technologies, which enable higher level of dispersion in organizations. It has also increase mobility, i.e. created possibility of management from mainland, sea and air.
Internet management abolished the autocratic style of management that was based on hierarchical division and the right of ones to issue, and others to execute commands. Internet abolished traditional department and sector division, i.e. descriptions of jobs with clear definitions of what, by who, when and how something should be done. Instead determinism as a basic characteristic of classical organization, internet enabled the creation of flexible and adaptive organizations, i.e. management organizations by the principle of "organized chaos".
Accordingly, the autocratic style of management embodied in the phenomenon of "spider web", where the main spider (director) represents the central axis around which all business activities “spin” is past. Namely, internet has destroyed the center and all parts of the system are made equally important, which is natural, because on the Internet as a set of "networks-of-networks", each section is considered equally important. However, if one wishes to define the center, it is not within organizations, which was the key basis of classical management, but outside, interpreted in the traditional meaning. Of course, the center of all centers is the consumer. Owing to internet technology and its integration with consumer psychology, it is possible to explore their wishes and strive to create offers or products for each individual, which is a new quality.
In internet management, the role of man will not be reduced, but increased. Man will reduce physical strain, because machines perform executive tasks much better and more reliably. Instead of the executive, man will deal with control functions. He will be the controller of machine, which will create greater possibilities for creating ideas and their implementation in business processes. This shows that technology has always been a limiting

factor of performance and business. In the mentioned context, information technology and its introduction into corporate business is a way to increase corporate performance, using primarily mental energy, i.e. brains. [7]

3.5. Usefulness of the introduction of ethical code and transparent business

Research done in some developed countries showed that the organizations which are exclusively oriented on profit permanently come in conflict with the public. Since corporations exploit a part of natural wealth that is limited, society and the environment start to exert pressure on the company to behave responsibly and require transparency in business. The fact is that in Serbia there no such practice, which prevents the diagnostics and the establishment of the level of competence of Serbian managers, i.e. corporate and social responsibilities and business ethics.

One way to secure good communication with the public is transparency, i.e. improved reporting on corporate management and corporate social responsibility. Informing about the mentioned can be done by requiring information directly from a company, or using sources available in public.

Since the first way is classical and impractical, transparency in reporting can be achieved with an analysis of data that are on the internet pages of stock exchanges, or certain companies. Information is the result of annual reports (final accounts) of a company reviewed by an authorized auditor and that the authorized auditor gave his positive opinion. Annual reports must be adjusted and by rule they do not require a standard financial form which was set by international accounting standards. Methodology used to determine the degree of social and corporative responsibility and business ethics is based on factorization of the most important elements given in annual reports, their transfer into certain questionnaires in order to make comparisons. The analysis has three elements:

- Corporate management
- Environment management policy, and
- Social management policy.

In corporate management, it is possible to analyze structure the quality of management, organizational structure (centralized, decentralized), relationship to independent auditing and communication with auditors, relationship of owners towards management, existence and implementation of company's ethics code in business etc. Based on the above, it is possible to partially determine the general orientation of the company. For example, if it si a "deep" organization, the orientation is on the bureaucratic style management in which the employees are not treated adequately.

Environment management policy. This element analyzes the respect for ecological standards, existence of special bodies which deal with the protection of environment, system of influence on suppliers, data on possible soil pollution, or of water and air, energy consumption (water, oil, food, etc.). If company insists that its suppliers have the ISO 9000 – 9014 certificates, this means that it is oriented towards the system of total quality, which implies the respect for environment.

Social management policy implies the protection of human rights and security at work, life and health insurance of the employees (individually and collectively), system of organization development in a shorter and longer period, employment policy, humanitarian policy and other actions and manifestations.

Very small number of organizations publish the non-financial part of annual reports on the inetrnet. Banking institutions publish them in paper media after the sessions of shareholders' assembly.

Although these are individual cases, a superficial analysis of those who publish their business data on the Internet shows that corporate governance is reported very thinly, which is natural because it is about bad structure of management and inadequate design of organizations. Data about these elements is presented for the ownership of companies and relations with independent auditors.

The situation is the same for social aspects that are occasionally mentioned especially on employment policy, while minimum attention is paid to ecological responsibilities. [8] For other countries of the former SFRY, data is not available.

Basic condition to provide transparency in the work of corporate management in Serbia is the existence of readiness for such form of communication with the public and orientation on the internet as an important tool in communication with all constituents which directly or indirectly have interests in the company. While internet connectivity and its use are relatively satisfactory, the readiness of management, primarily in public companies, for transparent work is worrying. In Serbia, there is not only a lack of transparency, but financial, non-financial, investment and other reports are also embellished and the public has no chance to see them. In that sense, we are witnessing a complete social irresponsibility and lack of ethics of corporate management in Serbia.

However, transparency is needed in nonprofit organizations as well. It is evident that high education institutions, especially those which have master and doctoral studies, must provide transparency of projects and dissertations in order to acquire insight of the expert public in the level of their quality, scientific cards of teaching assistants and professors, management etc. In this sense, there was significant progress in Serbia, because the normative acts of high education institutions mainly have obligations on the presentation of MA and PhD dissertations on

the sites of faculties. This is not a legal obligation, but the management of these institutions feels social responsibility for the transparency of their work and a need for communication with the surrounding.
Transparency in the adoption of the budget of the Republic of Serbia and its use by individual budget users would have positive effect on publishing information of public interest on corporate level as well. Especially if the use of budget would be verified by an authorized independent auditor, who should give his opinion the on the reliability of data. However, there is still no consensus on this, although there is a Law on auditing public expenses. Of course, some contracts concluded by the State are very often labeled as classified here, and in spite of the requirements of certain political structures in the Republic, various reasons are found not to make certain contracts transparent, i.e. available to the public. In this case, even if everything is materially correct, there is suspicion in eventual material benefit obtained by a certain state body.
The reduction of irresponsibility and immorality in corporate business in Serbia would be helped by the introduction of ethical informers, which exist in developed countries and who proved to be useful in the reducing numerous immoral actions and procedures. From the viewpoint of ethics, this institution is liable to critique, because sycophancy and telling on people are certainly unethical. However, practice shows that management must provide information which endangers the fortified system of social values and here, as in other cases, a part has to be sacrificed for the good of the whole.
Informers are employees in organizations which investigate illegal, immoral and illegitimate actions of employers or of individuals and other subjects. They should be selected by the management. They must not be identified as informers, and if that happens, they must be changed. The choice of these people should be made by special criteria, i.e. they must talk less, and listen more, work in the background. So, transparency in informers is unacceptable.
The basic condition for the existence of informers is the consent of the management, i.e. the top management should discretely choose these people. If that does not happen, and informers do their job, they may fall in the disfavor of top managers, especially when ethical problems are concerned, from the spheres of the embellishment financial reports, contractual relations that occur under the pressure of management etc.
Bearing in mind the state of corporate social responsibilities and business ethics in Serbia, it is not realistic to introduce the institution of the informer, partly due to unprofessional management, and partly due to a high degree of irresponsibility and immorality that exists in the very management structures. However, in the future, it should be counted on this ethical organ, especially when there is political consensus for the elimination of irresponsibility and immorality.

4. CONCLUSION

It can be concluded that in Serbia there is no sufficient awareness and that there is a need for the establishment of corporate social responsibility and business ethics. Therefore, Serbia must turn to the European culture, customs and business and use its experience by the principle of "creative imitation", i.e. accepting the specifics of Serbian national, cultural-sociological and religious ethos. This is because Serbia, as a part of Europe, belongs to the European culture, as different in relation to the American, Asian or other cultures.
Analysis showed that in Serbia there are no required conditions for the establishment of social responsibility and business ethics, on the state, corporate, and individual levels. This is because almost all segments of economy and society, having in mind managerial structure, have been caught by deprofessionalization, ideologization, amateurism and voluntarism, with a complete denial of professional, moral management. Management, as professional managing of human and other resources, is devalued in Serbia, and in some cases abused.
The exit from such situation should be sought in: professionalization of management in all segments of economy and society, all organizations and sectors, and the creation of adequate infrastructure which will be in the function of professional management, as specialized agencies, companies, consultants and agents. Simply, everyone must be highly professional within their profession. It is also necessary that the State should computerize state administration and introduce electronic government to influence, on its personal example, an intensive introduction of IT. It appears that no significan modernization can be done by organizations themselves, which are economically exhausted and not have resources for the modernization of business.
When professionalism is established, and primarily in the management of profit and nonprofit organizations, it requires responsibility and ethics in its own operation, but also looks for ways how to increase the quality of managerial decisions through new technologies. It appears that it is impossible to establish business success and ethics in Serbia and any national community based on amateurism and mixing politics in the managerial profession, because amateurism on the top level creates conditions to reproduce itself on lower organizational levels, which leads to failure and immoral behavior.

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CORPORATE SOCIAL RESPONSIBILITY IN INFORMATION SOCIETY

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Summary: *The society of tomorrow is undoubtedly the society of information science, knowledge and wisdom. It is based on information. A piece of information has become the third compulsory component and a strategic potential of every company. In that way, the land and the capital, have lost their traditional meaning and have given up their place to a piece of information or knowledge as a scientifically confirmed data. In modern conditions, a piece of information has become the primary resource, in other words the most important resource, because that resource can buy any other resource. A piece of information is also a restorable resource since it can be sold many times and still its owner retains the ownership rights. The more information and knowledge are sold, the more profitable they become, because a piece of information has the ability of being updated and improved. The above mentioned has made conditions for talking about a new modality of corporate management and corporate social responsibility. In developed information countries these phenomena have become a reality with the growing tenancy to spread to all the areas of economic and social life. Therefore, corporate management and responsibility are, first of all, related to the invention and proper use of information and knowledge, or elimination and reduction of abuse of personal and corporate information. In this thesis, the author tries to point to the new problems concerning corporate management and corporate social responsibility in information society and the ways of solving them.*

Key words: *corporate management, social responsibility, the information era*.

1. INFORMATION AS A BASIS FOR MAKING A NEW TYPE OF SOCIAL RESPONSIBILITY

Today, a piece of information is what energy was once in the industrial society. Having in mind its importance, everyone tries to be the first to get information, or to get it as soon as possible, because the person who disposes of information makes a competitive advantage and has a better chance to succeed. With reference to this, Kenneth Galbraith, the American economist for prediction of new tendencies says: „Nowadays, we see a new division in the structure of classes, the ones who dispose of information and the ones who have to face the ignorance. This new class has the power, not because of capital or property, but because of knowledge“.
Information becomes especially important with the invention of information technique and technology, which simplified and accelerated the process of data collection, selection and analysis, and thus enabled their transforming into information, in other words, into knowledge as the most valuable resource. In essence, information technology has contributed to the promotion of the corporate social responsibility concept. It is known that this technology abolished the traditional meaning of location as an important factor of corporate success. In other words, computers and information technology are used on land and sea, in the air, in all spheres of life and work, by which space and time have lost their importance in the information era. [1] This influenced the change of operating process and management responsibility which now refer to a piece of information as a resource, both concerning its revelation and its protection. That made good conditions for exceeding the company's and national limits of corporate responsibility. Therefore, in modern conditions, wherever any irresponsible corporate behaviour appears, it cannot be tolerated. This also made new opportunities and chances for system of value establishment, which is based on the elements of corporate social responsibility.
The phenomenon of digital gap which exists between computer countries and undeveloped countries is certainly the result of corporate management social irresponsibility of developed countries, or transnational and multinational corporations which often become more powerful than the medium developed countries. Led by

partial and exclusively corporate interests, corporations became supranational and those countries have become their services. In that way, the total or the global efficiency is reduced, since it is known that in the network Economy every part of the net determines its power and its expansion increases the economies of scale effect. In that sense, new problems have arisen in the area of management and social responsibility. Those problems have to be solved in different way, using different concepts and by applying information technology.

The good news is that the digital division in America is decreasing, but there are still exciting challenges to be met. Especially people in rural areas, the aged, and the disabled and national minorities fall considerably behind the public access to the Internet and information education. This is also a specific rule of law in other countries and a part of social responsibility which gain in importance. The above mentioned happens when more enactments are passed at the level of the World Community, which enable more opportunities for information accessibility.

The bad news is that outside the United States there still exists a big information gap which spreads more and more, particularly in developing countries in which there is a lack of information infrastructure and educated information experts. It is obvious that digital division is a big false moral step of modern society, which causes serious implications at global level, even in developed market countries in the world.

The previous moral problem spreads out to other ethical issues, especially when information privacy is concerned. This problem was not a crucial one in the agricultural, industrial civilisation. By the invention of the computer and other information technologies, the main objective was finding out information. Under new circumstances, the problem of information protection and information privacy protection became dominant, since it is logical that the one who is the first to get information and keeps it secret for longer time is the one who is more successful.

2. CHARACTERISTICS OF CORPORATE SOCIAL RESPONSIBILITY IN INFORMATION SOCIETY

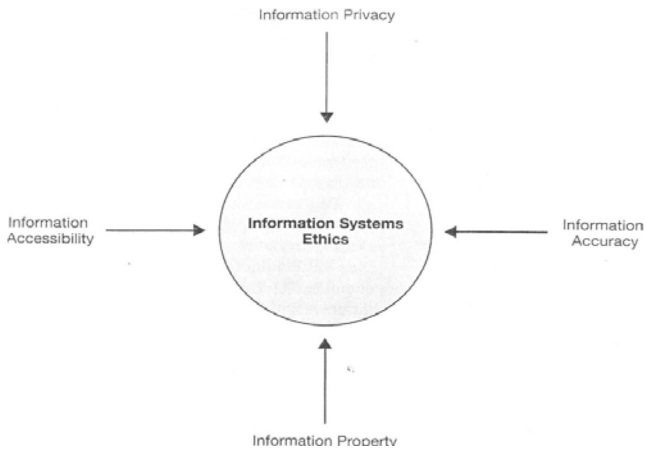
Numerous business scandals which happened in the two decades of the last century leave serious dilemmas and ask for an answer to the question: How to create a moral and socially responsible company which would be more competitive in relation to immoral and irresponsible companies. So, the dilemma is whether it is useful to be moral in information society or not, in other words: do morality and responsibility make certain advantages in business. The problem is complex, because there aren't clear correlations between moral, responsible business and corporate success. However, the stereotypes show that moral behaviour in business is advisable, because, to claim the opposite would not be acceptable from the standpoint of consumers of goods and services. Therefore, many corporate national communities and companies in the information era tend to be moral and responsible, proving that ethical business is profitable in the long run.

According to the attitude of CEO Deloitte & Touche, LLP, Harold Tinklera, ethical company management is based on culture, control and responsibility. In other words, moral and responsible companies are created, which is a natural process because nothing comes out of nothing and everything has its roots and origins. Although these elements of ethical company management are relevant, the most important factor is culture or organizational behaviour of workers [2]. Organizational or business behaviour of management and workers often represents a valuable item in the assets of the company which is unjustifiably being neglected.

Moral and responsible behaviour and personal examples of managerial and governing structure in the company are the best ways of developing a desirable organizational culture. In order to create and then maintain certain organizational culture, companies use different mechanisms and institutions. Some companies decide to create a new job: moral manager, who is often a deputy CEO for moral operation and education. This practice was taken from military organizations of the real socialism countries, which basis was in ideological postulation, spreading out the real socialism ideas and self-management as the most human social system.

Corporate practice has shown that technical progress is not worth much without a satisfactory moral and socially responsible component in a company. This is confirmed by the example of „MCI WorldCom" company. A complaint was made against the global telecommunication company for fraud, in fact for doctoring the financial reports and hiding the 4 million dollar expenses. At the moment of hiding the expenses, in order to reduce the account tax base, the company made a financial effect in an illegal way, which was against ethical principles. This had even worse consequences than repayment of the four million dollar expenses. When this scandal and immoral actions were revealed, the company put great efforts to restore its moral credibility, because it turned out that nobody wanted to deal with an immoral company. With a view of restoring a convenient moral atmosphere and obtaining shareholders, the company decided to employ a moral and responsibility manager, Nancy Higgins, who, at the same time, rose to the high rank in managerial hierarchy, or the position of executive vice-president of moral. Immediately after the appointment, the new vice-president made a plan of moral training for more than 55.000 workers, introducing the official moral code and moral hot line in order to create moral and socially responsible culture within the company**.** [3]

In that way, "MCI WorldCom" company informed its workers, and what is even more important, its business partners and customers, that morality in business is a new corporate value which management wants not only to develop but also to implement in all elements of management process. This was also a strategic move for a rapid Consolidation of this company which was also meant to demonstrate a new business philosophy, in the view of obtaining confidence and loyalty of its business partners and customers.
Parallel with the above mentioned, corporative management also must take care of other ethical values or moral elements. The introduction of information technology and the need for moral didn't ceased, but they appear in a new form and are taken more seriously because certain omissions or mistakes in corporative companies are attributed to computers. Even though Richard O. raised problems of ethical values twenty years ago, this issue especially became important at the beginning of the third millennium. In the information era, it is insisted on the very elements given by Mason, or: information privacy, information accuracy, information property and information accessibility, which can be seen in the following graphic [4]:



These four elements of information systems ethics are not autonomous. In other words, they do not operate independently but influence one another and are often in cause-and effect relations.

2.1. Responsibility and the phenomenon of privacy in the information era

Computer science has undoubtedly brought many benefits and joys. However, it has caused the increase of "information crime", as the opposite of moral and socially responsible behaviour of companies and corporate management. Information crime appears in different forms. The records show that in recent years the problem of identity theft has become very frequent. The concept of identity theft means a theft of other person's number, for example: a personal identification number, a credit card number, a driving licence number, a statement of accounts and other information with the aim of gaining tangible and intangible profit. In some cases, when a payment or credit card is stolen, thieves can take money directly from the victim's account. Since in many national and private companies personal data base are easily accessible to public, there are many opportunities for thieves to obtain the valuable information in an easy and simple way. Regaining one's identity and credit rating can be very frustrating and often requires a lot of time and effort. Many people have nervous breakdown, sometimes the victims fall ill seriously or even die. [5]
We encounter a paradox, since information technology has brought the greatest benefit to highly developed countries of the world. Parallel to the mentioned, these countries encountered new problems which often transcend the pleasure of Internet technology. The most extreme form of misuse of information technology is the identity jeopardy. People are aware that the information era has broken the traditional phenomenon of secrets which objectively exists with every person, company or country. It is shown that every message sent by an individual or a company by Internet is stored and saved in several places. The conclusion is that an e-mail is a completely unreliable instrument of communication. The content of an e-mail is accessible as though messages or information were sent by a postcard. What is more, every sent e-mail has two or three copies which are saved and stored in different computers: the sender's computer, the recipient's computer, the sender's computer server, the recipient's computer server and the recipient's computer.
Today, the problem is no longer how to get information but to find the way to protect it, use it adequately and make a corporate advantage out of it. In the information era, a person sometimes believes that all eyes are on him

and that information which he sends are open and available to everyone, where privacy and intimacy, as his basic needs, are brought into question. This includes a great number of private information such as: identification Number, social security number, credit card numbers, business account number, health insurance number and property status, even the history of one's family, marital status and a family tree. In great number of cases, the mentioned information can be seen on the Internet, which proves the jeopardy of privacy, as one of the values democratic societies strive for.
Of course, the negative information about an individual often remains on the Internet for a long time. It makes a burden to every person. Therefore, there is an urgent need to regulate this issue by law at national and global level, in order to prevent dissatisfaction and unnecessary conflicts at social or corporate level.

2.2. Corporate social responsibility and privacy theft

According to the survey published by Javelin Strategy and Research, about 9 million adults were the victims of identity theft in the United States in the period from October 2003. To September 2004. Better Business Bureau estimates that the average loss on this basis is about 1.000 dollars per person, not to mention the time spent in correction of cards and submission of claims for new identity cards and documents, such as social security and Driving licence numbers. The Federal Commercial Committee confirms that the identity theft costs for companies and clients amounts even 60 billion dollars per year. [6] The researches in highly developed countries show that the identity theft victims are people of all age groups, both male and female. The difference is only in intensity. According to the IFCC data, a typical fraud victim in the USA is a male in his late 'thirties, who lives in some of the most populated states of America. However, there were also other victims of different age, occupational structure and sex. The Internet has undoubtedly become an essential part of life and work of every person. However, it has also become important for various criminals and frauds in gaining profit. In that way information technology enabled irresponsible and unethical behaviour of individuals but also of companies, with a growing tendency to cause serious problems to the private life of every person.
Having in mind the above mentioned facts, the Federal Commercial Committee of the United States has taken measures and procedures for decreasing detrimental consequences of the American society sophistication. The Committee gives advice as what individuals and corporate companies should do in order to prevent identity theft and what a victim should do in case of identity theft. The similar measures are taken by corporate, banking, insurance, commercial and other companies. This organisation does the following: training and practice for personnel in service organisations in order to prevent identity theft. But the personnel are also trained to respond to charges against identity theft. A great number of agencies specialized in dealing these problems in order to prevent the damage as a consequence.
Apart from authorities and organisations, corporate management also has a multi-dimensional responsibility. However, its primary responsibility is the one towards the employed, because the employed are asked to deposit their personal details and data in personnel department, and also their permanent updating and reconciliation with real facts. It often happens that social cards often ask data such as private property status of workers in order to put them on the average living standard level through a certain set of privileges.
Companies possess personal details of every worker. Those personal details are a part of every application form for a job, although it is obvious that a big number of candidates will not get that job. Experience has shown that incomplete application forms for a job are rejected, so that people are forced to give the required personal details anyway, sometimes to give even more details than needed. Their data are recorded in corresponding reviews and lists; therefore they remain in the company even after returning original documents which were submitted when applying for a job.
The situation is similar when using the services of numerous companies. For example, it is impossible to book a room in a hotel or to stay overnight, without giving personal details: identification number, place of living, address, the year of birth etc. In practice, people disagree with the fact that their personal details are publicly available. Apart from identification personal details, potential employers, creditors and others, can easily find out somebody's credit information, phone use, insurance coverage and many other interesting details. An employer can get information about the applicant's past, the rating in the previous job or about problems with the previous employer. He can also ask the applicant about his private life, even take a drug test (as it was done by the big retail Wal-Mart system), and take an IQ test. Such test results become the property of the company. [7]
When an applicant gets a job, the employer can closely monitor and supervise him and find out: where he goes, what he does, what he writes, who he sends e-mails to or who he gets e-mails from – at least during working hours. Some companies, especially in undemocratic countries, want to control when workers start working for another company or get a job abroad; they also check what the workers say about the company they left, etc. The American Management Association stated in its analysis that about 60% of employers have tracked both the incoming and outgoing e-mails of their workers since March 2005. which showed an increase in comparison to 2001. figures which amounts about 47%.[8]

2.3. Internet communication tracking as corporate problem

The Internet has become a modern way of communication. As a strategic technological innovation, it has changed the traditional way of communication, accelerated the information transmission, it has created and is

still creating conditions for a cheaper way of communication. Internet communication is expected to be free of charge in the near future. That will call in question the operation of modern telecommunication companies which were the most profitable in the information era.

The introduction of Internet technology in corporative systems caused Internet abuse, in other words the use of the Internet by workers for private purposes, which imposed a need for corporate management to control Internet communications occurring in the company. It is estimated that over 27 million workers have been under surveillance on using the Internet. Employers have legal rights to supervise the use of their resources, including the use of working hours for which workers are paid to do their job. Apart from legal rights, there are many other reasons to justify supervision on using the Internet.

- One of the reasons is that workers are employed in order to do their job but not to surf on the Internet checking the prices of goods stocks, paying Internet roulette deposits or buying presents for their family members or friends. It is estimated that yearly costs of Internet surfing during working hours in the USA amounts 1 billion dollars plus 1 billion for labour productivity loss. These are enormous expenses in business and they reduce the competitiveness of companies.
- The second reason is that management does not want to accuse them for making hostile working environment because of rude or unpleasant messages, improper pictures or humour on the computer monitor of some of the colleagues. Companies would probably accept monitoring and storing of all e-mail copies because they fear of racial violence and sexual harassment. This electronic note can easily give insight into what really happened and enable the managers to react promptly if necessary.
- Managers want to stop the leaking out of company's secrets out of the company. This is very important in industries of advanced technology for the protection of intellectual property. Managers must be quite sure that workers will not pass on secret information which can be used by others and do harm to the whole company.

The consequences of inadequate and improper use of computers at a workplace can be very serious both for workers and for the company. For example, before Christmas in 1999. , 23 workers of *New York Times*, who worked in the administrative centre in Virginia, were dismissed, whereas a great number of workers got a reprimand for violating the company's policy which forbids the use of the corporation's e-mail system for „making, sending or presenting any kind of aggressive or disturbing messages, including photographs, pictures, graphics and audio material."

The same happened in Xerox company, when a number of workers were dismissed because of the eight-hour surfing on the Internet only in one day and for visiting the web sites with forbidden contents as well as ordering and buying goods on the Internet during the working hours.

Two executive directors of Salomon Smith Barney company were dismissed after a routine check of the company's e-mails because some pornographic material was found.

The Lockheed Martin company e-mail system was blocked for 6 hours because of the worker who sent 60.000 e-mails to his colleagues (and asked them to reply immediately). Since this company completely depended on that e-mail system because of internal communication, the system blockade cost this company more than 100.000 dollars.

Although managers use supervision of a workplace in the control process, workers in the United States of America are protected by the federal legal act from 1986. named The Electronic Communication Privacy Act. This act, abbreviated to ECPA, forbids unauthorised interception of electronic communication. Although this act protects the workers' privacy, it is not read and treated in a proper way at a workplace and therefore it is not illegal to supervise workers since the supervision is done for the purpose of the business and benefit of the company. Even though workers think that it is wrong that the company monitors their work by electronics and dismisses workers for trivialities, courts of justice have a solution even to this problem: the rule is that if computers are in possession of a company, management has all the rights to supervise, check and control everything in the computers.

2. 4. Methods of Internet communication control

Having in mind that law acts concerning violating the privacy rights were passed before the invention of information technology and the Internet, they are often on the side of workers or those who misuse the Internet. In order to avoid possible problems and penalties for illegal sanctions, corporate management must establish the procedures of Internet communication control. Methods and procedures are different and are often restricted by

various law provisions, as well as by social and cultural factors. Regardless of diversity, attention is called on some of the possible ways of Internet communication control.
Corporate management should establish clear regulations and instructions for computer use and make sure that every worker is familiar with and obey those regulations. It is necessary to tell workers in advance that all they do on computer is under a process of control and monitoring, and to clearly emphasize the acceptable instructions for using the Internet and e-mail systems. [9]
It is vital to have in mind that socially responsible manager must protect corporate interests and strive for using the corporate Internet for the corporate purposes. This is especially important when workers spend a lot of their working hours on the Internet for personal needs, such as: looking for the best holiday destinations, the lowest bidders for personal purchase of goods and services, etc.
Namely, corporative management controls e-mails of the employees as they can be sued for what employees send to each other outside the firm and that the employer pays damages based on that. Data show that 70% of web traffic happens during working hours. This is a good reason for companies to control what and how long employees look for on the web. Federal organization FBI reports that 78% questioned companies state that workers abused Internet privileges , downloading pornography, pirate software or some other activities that was not business oriented. Also 60% of workers say that they visited web sites or surfed for their own needs. Because of the stated there came to a paradox in Internet productivity. This paradox in seen in the fact that introducing informatics technology should improve productivity in administrative expert jobs. This did not happen in a large number of organizations as a large number of employees spend significant amount of time on the Internet during working hours using it for their private needs.[10]
Bearing in mind above stated, the company makes technologies and concepts for overseeing behaviour of employees at stated questions. There are softwares that can scan e-mails, both incoming and outgoing. Softwares can search for specific words and phrases in message title or message it. The programme scanning e-mails can be built in the computer as a Trojan. It can be hidden in an e-mail of a usual appearance or some other file or software.[11]
Some companies use less intruding approach from real reading of e-mail messages of the employees. Their programmes for e-mails check only a certain level of e-mails. This suggests that there might be a problem and an employee is informed about the situation and instructed to fix it. Forceful overseeing, and nosing around provokes a justified reaction of the employees which negatively effects their satisfaction and success. It shows that there are no mechanisms of complete control of the employees and that extensive control can often produce a counter effect for corporative success.

2.5. Corporative social responsibility and on line protection of consumer privacy

Companies in the era of informatics face a large number of dilemmas in bringing management decisions. Nevertheless, for the company in informatics era buyers or consumers have the greatest importance, because of which they try to get to know them, by numerous questions, to control and manage their requests or needs. The reasons for getting to know customers are as follows:[12]

- Companies want to know who their consumers are. Informatics using fastened this process and made it simpler. But, on the other side, consumers want the companies to leave them alone and know as little as possible about them and thus keep their privacy.
- Consumers want the companies to enable what they need and before all timely and reliable information concerning products or services they buy. Nevertheless, consumers want their tastes, wishes and habits to remain secret, so that based on this information no one can make conclusions about their character,
- Consumers want the companies to inform them on products and services they might want to have but they do not want to be suffocated by boring, unnecessary, everyday commercials.

So, enormous amounts of personal information are available to companies from various sources Web sites that call you by name and Amazon.com’s famous recommendation „people who bought this product also bought a part of the company“ are examples of personalization, which was enabled by web site’s knowledge on individuals.[13]
Besides the fact that it can gather needed information about consumers, the company may readily approach information about users at some other place or other places. Credit card companies sell information, as well as official biros and mailing list companies. Companies for web traffic control as DoubleClick follow individuals and other surfers through web and then sell information about where someone went, and how long did he stayed there. DoubleClick can gather information about anyone during a period of time and sell to their users a much profiled character. DoubleClick is also a middleman for companies who want to broadcast the web to surfers. When hired by a company that wants to sell something DoubleClick identifies people who might be interested and sends commercials to them in the form of banners or pop-up windows. Followers of this practice say that it is good for the surfers because they get aimed commercials and less undesirable commercials. Everybody can see how true is this statement. DoubleClick started at first with following users without connecting their identity

to information. In 1999, DoubleClick changed its politics and said that user names and personal data and e-mail addresses will be linked. As a result to negative reaction of users DoubleClick revoked the announced change. Interestingly, DoubleClick did not state that they will never continue to use this opportunity but only agreed to wait while standards for such a policy get to its rightful place.
On the other hand, Internet changed the way by which users gather information, buy, do business, said the Consumer Protection Manager of Federal Trade Commission, Jodie Bernstein, in November 2000. Skilful cones and other criminals became very high-tech and use the Internet in many ways to cone consumers. Federal Trade Commission of the USA made advice list to enable cones to do Internet embezzlement.[15]
In the end one should bear in mind that even the company plans and promises to protect customer information it usually does not do that. When faced with court order the company must give customer lists up. Even more, courts judged in the case of bankruptcy of the companies that consumer files are goods as any other which can be sold to pay the debts.

2.6. Corporative responsibility for information correctness

Problem with information precision became a very profitable one in today's business world. This term includes qualifications on information authenticity, finding blame and culpable persons for possible mistakes in information, especially those that can harm people in material and spiritual and even life sense. With all the computerization that is going on, population enlarged its expectations dealing with quality of informing, than it was before and is less ready to forgive mistakes.
There are stereotypes that computers are never wrong, which means that everything coming out of a computer must be correct and because of that control checks are hardly done. This is undoubtedly a mistake which implies the necessity of introducing controllers who will control the machine and its outputs. A computer functions the way men planned it to. Its reliability is enlarged by a man, thanks to new knowledge and skills. This means that introduction of new informatics technology did not decrease the importance of men. On the contrary, his role is increased in creative way that is distinctive for human being sonly.
There are many stories on data precision problems in banking and financial information systems. This information showed them to be the most important for the investors and other interest groups, especially with investments because of which a special attention is paid to their reliability. This means that information correctness may be seen when observing the sae that happened in Los Angeles, and it certainly happened many times in many other countries and banks .
Married couple Louis and Eileen Marches bought a house by using a mortgage at their local bank. Louis personally took care to pay the instalment of the mortgage. He even notarized the booklet after each automatic payment of the instalment. A few years ago the bank warned Marches that they are back with payment. Louis took his booklet and went to the bank but as there was no payment in the computer the employee and her chief refused to accept his proof of payment. A month later the same happened again, but now with even larger delay in payment. The bank refused his proof of payment relying on claims shown by computer system The bank initiated a court dispute to claim the house which led to a hard cardiac arrest with Eileen. After a long court procedure Marches got 268.000$ from the bank and an excuse: „Computers make mistakes", „Banks makes mistakes, too" and similar stories.[16]
Nevertheless, it should be said that computers do not make mistakes because they function the way men projected them to. When machine reliability is increased it happens by men's will. This means that people make mistakes. Human error often leads to terrible consequences including death.

2.7. Responsibility for protection of informatics intellectual property

One of the characteristics of the new economy is appearance of knowledge as the most valuable resource. Knowledge is the only private property that cannot be taken from men. But in modern conditions a theft of knowledge and intellectual property exists as: knowledge, information, design, etc. These inputs overwhelmed material inputs needed to physically build a unit of production. When knowledge is main raw material launching the first unit of product costs millions of dollars, but the price for the second and any other following becomes unimportant. [] That is why in modern conditions a special responsibility to protect intellectual ownership is set, as in macro and micro thus in corporate level.
Problem of responsibility and protection of intellectual property might be analyzed from legal, ethic, economy and other points of view. This kind of responsibility especially gained in favour at the beginning of the third millennium by introducing informatics technology which illegally used became an object of abuse itself and stealing seen in software thefts first of all. It is expected that responsibility for intellectual property protection will more and more become an issue at global level. By developing technology, abuses of informatics software will become less and less possible, but new possibilities of this question will probably appear. To the previously

stated we should add one more alpha plus, and that is increase in enlarging corporative responsibility of management and culture of intellectual property respect, the use of which must be paid or refunded.
Ethical issue frequently found especially in cultures which insufficiently value the property of others is from the sphere of intellectual property and copying and using private softwares. Software is a kind of intellectual property or creative work in the form of physical product. Apart from the stated: music, novels, paintings, sculptures, product designs, schemes and other property documents owned by companies are all examples of intellectual property. These documents together with music, novels, etc. Worth much more than physical form they are delivered in. For example a U2 song is translated more than a CD where it is bought. The song is also an example of intellectual property protected by law on copyright.
Law on copyright protects the right of literary and drama work, music and theatrical compositions and works of art. Copyright is legal protection given to express ideas as songs, video games and kinds of private documentation. Having a copyright means that nobody can use a song or a videogame without an author's permission. As a kind of intellectual property software is usually protected by copyright although it sometimes belongs to patent laws that protect an idea as a design for a peeling machine or industrial pump vent.
Law on copyright in the USA does not forbid usage of intellectual property totally. There are some noticeable exceptions. For example TV programmes may show a video game someone made without author's permission. This is the example of using material protected by copyright for creating material other material or TV programmes. That's legal and belongs to the doctrine of rightful usage. Doctrine of rightful usage says that material protected by copyrights in certain situations for example in making new work or inside some boundaries for teaching process.
Generally, decisive factor in legal decision for disputes about legal rights is whether the owner of the copyright was or will be denied material income because of the usage. Courts while deciding take into consideration factors as how much work was put in, and how much was it used, when and by what basis was the decision made to use it. What is important to know is that breaking of copy write law is illegal. This means that it is against the law to simply copy without permission, out of the situation of rightful usage to use a picture protected by copyright, or a text or anything else, whether the material protected by copyright is on the Internet or not. It is illegal to copy software protected by law on copyright. IN the USA it is always permitted to make one copy of software protected by copyright to make a reserve. When protected software is bought a buyer pays for the right to use protected software. Each landing to somebody else with or without payment is illegal and punishable by law.
How many copies can a buyer make will depend upon on copyright agreement which comes with a software package. Some companies forbid the software to be installed into the other computer even if both are individual private property and nobody else uses them. Other companies are less restrictive and allow software copies to be installed into a few computers as long as the package is used by one person only at any time. During this time a company considers a software as a book as a buyer can have it on more different locations and may land it but only one person can use it at a given time.
If protected software is copied and given to other person or persons a software piratery is done. This is unauthorised usage, multiplying, distribution, or selling of a software protected by law. Pirate damages software industry around 12 billion dollars a year. Microsoft gets more than 25000 reports for software pyratery every year and they are supposedly all checked by the company. Countries that are damaged most are: the USA, Japan, The United Kingdom, Germany, China, France, Canada, Italy, Brazil and the Netherlands. One of the four business application in the United States is considered to be piraterized. In some countriesmore than 90% of business software is piraterized.
The main responsibility for stealing intellectual property is taken by corporative management which uses software without compensation. Management of underdeveloped countries and transitional countries is the first in line with this problem as the level of sufficient protection of intellectual property is low there. Legal and ethical regulation of this question increases corporative social responsibility.

3. CONCLUSION

Out of the stated we can conclude that fast and broad acceptance of the Internet did not bring benefits to business only but also enabled cone artists a very popular tool. Internet abuse creates large problems as in personal and individual thus in corporative and global level. This problem appears on relation management employees, as a small one towards buyers, or consumers, towards nature and surroundings where the company does business, towards local management, etc.
A large number of information technology abuses are processed but it is estimated that a large number stays outside of statistics, as invading of privacy is often not reported. One of the main reasons of the above stated is in irresponsible behaviour of the employees towards the company. Nevertheless, responsibility belongs to corporative management, too, as it did not find the reasons for elimination or marginalization of this problem.

Including concepts of corporative management and corporative social responsibility in which a system of company responsibility is broadened outside corporative boundaries is an important instrument to educate employees before all, to use the Internet for corporative and not personal purposes.
Here sanctions as well as in other cases do not produce results as it is shown that each action produces reaction. When social and ethic activities become practice or a way of life, causes of numerous negative actions and deeds will disappear which will increase company and national success.

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SOME PROBLEMS AND POSSIBLE SOLUTIONS IN INFORMATION TECHNOLOGY APPLICATIONS

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Summary: *Since their beginnings to the present day men have introduced new techniques and technologies to improve their success. Each new technology got its transiency in practice if it was more successful than the others. That happened with information technologies, and will happen with all the other technologies which will appear. Each new technology produces and solves certain problems, and creates new problems as in individual thus in corporative level. That happened with information technology or its application in organization systems. In today's development, information technology found its application in primary and secondary sector, as well as in tertiary sector with operative executive jobs. But it did not find application in top management level and sector of services. The aim of this paper is to pinpoint individual and corporative problems in applying information technologies and possible solutions, for purposes of establishing successful business.*

Key words: *individual problems, corporative problems, information technology*

1. CHANGES AND PROBLEMS AS INITIATORS OF CREATION OF INFORMATION TECHNOLOGIES

When trying to explain sources of existing personal and corporative problems, it is necessary to start with men, as most perfect and most contra verse living being. It shows that men are specific living beings; they are never satisfied with existing state but permanently set new goals. But by achieving some goals they create new goals and as a rule goals of higher level. Situation with needs is similar. It seems that by satisfying some needs men create new needs which are as a rule needs of higher level, as needs of self actualization are, and so called „I"needs. So, increased needs have men in each new time dimension and their striving of fulfilled them completely is one of the natural driving forces that exist with every individual. [1]
Parallel to previous phenomenon a completely opposite tendency appears; increased needs of men in each new time dimension are followed to permanent decrease of natural resources, required to satisfy those needs. Here, the problem multiplies, as two variables, or needs and resources have a tendency to increase potential differences. In future stated tendency will increase even more. This problem, above stated must be solved by corporative management. Its role is to rationally treat natural and other resources and to try and satisfy higher level of human needs with limited and decreasing resources. This could be achieved by increasing knowledge, skills and abilities and also by applying new and before all information technologies in modern business.
Problem of individuals integrate into organizational problems, which is logical as organization is not made of buildings, machines, equipment or assets. Organization is people with their needs, knowledge and skills, and their mutual relationships which exist among individuals, parts and surroundings. Technical supply and equipment are the result of applied and used knowledge, which improves producing power of men.
Analyses and researches of business corporative practice show increased number of problems corporative management deals with. This is the result of change which appear at global level, in the surroundings where the organization functions, as well as intern problems which appear under influence of natural factors (employees growing old, work ability decrease, retirement, employee fluctuations), or artificial reasons as reorganizations of the organization to improve functional success of the companies.

Competition is at such a level today that carefree life is not guaranteed to anyone anywhere. Buyers became more demanding, as they ask for high level of quality at lower prices and additional satisfactions if possible. Traditional understanding that for a high quality product you must pay a high price loses its breath in traditional business; it is presumed that quality is obligation and cannot be discussed. This is the only constant which must not be brought into question. What can be discussed in the world of business is the price and general goal to make it as low as possible and to improve other performances of product and service. This situation leads to increased risk for improvement and survival or decrease of the life expectancy of the companies which will continue in the future in even fiercer speed.
At the other hand, employed in organizations of corporative type are less and less tolerant to hierarchy boundaries forced by the management today, and with a treatment towards their status, whether it's their appreciation or material satisfaction for their work, or their work and living conditions. This was improved by increase on intellectual strength of the employees, increased power so syndicate unions, and the recognition by the owners and management that only a satisfied employee can make a satisfied buyer or customer.
Similar situation is with owners. Namely, stock holders and investitures became more demanding. They are not satisfied with any profit but with a profit that is often larger than expected. In these circumstances management found itself in a hard position, maybe harder than ever. It is between „a hammer and an anvil". At one side there are buyers who became choosy more and more each day and whose loyalty must be gained and paid by the company, and on the other side there are the owners who require an appropriate profit and appropriate growth and development of the company. Increased demands of the surrounding to the corporate activity are a new paradigm which appeared first of all in Europe, and promotes corporative society responsibility of the companies for improvement and sustainable development of the surroundings. This innovation will get more appreciated in the future, especially when development of local management is concerned and infrastructure for improving life standard, taking part in ecology and other movements and projects, and formulating those society values which improve national and corporative rating. [2]
Analyses show that world population has never had better life standard, that today's average human life expectancy is the longest in human civilization and that people discovered many secrets of nature that they use for satisfying their needs. But facts also say that people have never been more dissatisfied concerning work quality, or concerning buying and consummation of products and supplies. Simply said the world came into a situation of general dissatisfaction where it gets harder and harder to satisfy buyers, employees, owners and other constituents who both directly and indirectly take part in business and service process as suppliers, banks, business surrounding etc.
In stated circumstances which according to all criteria represent radical changes in comparison to classical organization and management, it seems that one of the ways out is application of new concepts and technologies and especially information technologies in corporative management. Technology in management does not imply only technical tools and instruments used to relieve muscle strength but also organizational instruments which improve corporative success. Those are techniques and technologies of brainstorming, reengineering, benchmarking, total quality technologies, SWOT analyses, etc. By broadening the term of technology on stated or other organizational tools, conditions are made to understand management itself as a concept and a technology which has its own technology. So, as men by using tools relieve their muscle strength, so by so called organizational creative technologies creative projecting is enabled, building and managing corporative organizations. We should also pay attention to the fact that technology, informational technology and the Internet cannot solve any problem by themselves, but without which problems cannot be successfully solved.

2. POSSIBLE SOLUTIONS

Solving stated problems is possible in different ways. We should immediately say that there are no universal solutions nor they can ever be. Stated constatation is real as management does not deal with formulas and machines but before all people. As it shows by solving a group of problems we create new problems and that life without problems is not possible. This comes out of an indisputable fact that changes cause problems, and changes come out of movement as a condition for every living being survival, and also organizational system survival. Considering the fact that movements provoke changes as a natural law, and changes cause problems, it is obvious that problems are good for without them there would be no changes, or movement and no life itself. [3] One of the most efficient ways of solving stated and other problems is in applying new and before all information technologies on national, corporative and personal level. Even though men discovered more efficient and more effective technologies in each new time dimension, to increase their work success and life satisfaction, a problem of appropriate application of new technologies prevailed till modern times.
This applies to informational technology which succeeded in enabling fast, quality and cheap communication among people at great distances, location as a traditional factor of success was made worthless, or faceless and time real. Even though informational technology is constructively powerful it is still not well applied and

sufficiently used in corporative and other organizational systems. Namely, on some organizational and functional levels and areas applied and on the other insufficiently applied ore completely disregarded.
According to this its influences are different on a level of corporate organization, as it is known that inconsistency of parts of a unit decrease total corporative success.
Analyses and researches of corporative systems show that information technology is mostly applied to executive and operative jobs and working assignments, as producing, bookkeeping, legal, general and administrative. In banking, trade, insurance, traffic and other service activities, operative and executive jobs are mostly technologized. Today, it is possible to do executive activities by computer, study at distance, and buy at TV shops, communicate from land, sea and air. Application and improvement of functionality of modern technologies for performing operative and other jobs is still being improved, and that means that projectant and constructor of information technologies observation was and is still aimed at conditionally said bottom of the hierarchy pyramid. We say bottom "conditionally" as there is no classic centre in network economy, and if there is one it moved to what was once periphery, and is composed of buyers, or consumers as the most important part of each company active.
Numerous examples show that operative executive jobs achieved significant results with a tendency of their increase. That is undoubtedly good but not sufficient. Namely, by technologization of executive jobs in modern conditions one does not achieve competitive advantage. So, every competition to make a certain product or offering service in a shorter period of time or forcing competitive spirit at usual methods and techniques does not give a chance to gain important competitive advantage. So, it is not possible to compete in the speed of classic mail delivery and invest in modern cars, better sorting organization, packing and delivery in modern conditions, even though these services will still exist. Solution in modern conditions is in using new technologies, concepts and philosophy of doing business, especially in the case of more and more choosy and sophisticated payment capable demand.
It shows that a lower management mostly equipped with appropriate equipment which uses in implementation of operatic into tactics, or managing process, which takes place at a level of operative executive jobs. Lower managers, chiefs, brigadier, group leaders, supervisors, etc. are educated to use information-communication equipment and it is mostly used with a tendency of permanent functional improvement and simplifying in usage.
New technologies and before all information technologies influenced middle management level negatively. They mostly cancelled or marginalized middle management, or the level of management of administrators, supervisors or junior chiefs of staff, or others who took most of the burden in organization of operatic implementation they dealt with.
The reason of such a condition is in an incorrect starting base. It was assumed, and it is still assumed today in most of the cases, that introducing information technology should rationalize or decrease hierarchy levels and a number of managers. The solution was searched in cancelling or radical decrease of middle management, by which jobs of middle management should be taken by managers of strategic or top level and partly lower level managers because of information technology introduction. Because of that in some companies lower and top levels of management were strengthened, to achieve functionality in corporative management. [4]
Beginning idea was logical, but it proved to be harmful in practice, and the result is unknown places and roles of managers of some organization level, etc. It is known that middle management in companies has a task to take part in conception and suggesting of some strategy elements and after it has been completed work on its improvement and conception of operatic for strategy implementation. So, middle management should create the idea in its own hierarchy or functional level and after its verification to put it into practice. This means that it doesnot function as a "trafficker" simply carrying the decisions from a higher to a lower level of management but actively takes part in formulating of applied strategy, which should answer the question of how should something be done effectively and efficiently.
This strategic mistake negatively influenced top management success first of all. Moving jobs and working assignments from the middle to the top management level caused suffocating of strategic level by which it was forced to deal with problems of implementation and less important problems before all. In that case top management disregarded development as a key function and assignment of corporative management, which decreased corporative success.
Elimination or marginalization of middle management decreased lower management success. It appeared that lower management could not do the jobs of middle management as it is not qualified for it. So, elimination and marginalization of middle management increased entropy of managing system. By introducing informatics technology it is possible to talk about decrease in levels of management system, especially middle managementbut its elimination or marginalization must not be considered.
The problem of insufficien application of information technology is mostly expressed in strategic or top management. It shows that strategic management does not use information technologies sufficiently in managing cororative process or planning, organizing, leading and motivating, coordinating and controlling, and also for strategic functional areas as finances, business process designing, human potential, development, etc.

This problem happens in conditions when top management is equipped and handles modern technology infrastructure by which it serves as a decoration or to make an impression that management is on the level of modern way of doing business.
Final outcome of the stated is in inadequate productivity of top management, which goes behind on productivity of lower hierarchy levels. So, the more you go from conditionally said pyramid bottom to the top, there is a tendency that management processes are less supported by new technologies. The stated makes a paradox, as it is known that the most complex jobs are done at the top of the pyramid organization and that it would be natural to use informatics technology of the best and last generation at this level.
More intensive usage of informatics technology on the top level management creates the highest chances to achieve strategic competition advantage. This is mostly seen through speed and quality of achieved information, or bringing managing decision of the highest level. It shows that companies who react fast and adequately to a certain problem or by diagnostic prediction prevent a problem; they make significant competition advantage or achieve higher success. In this part informatics technology can achieve the highest effects. [5]
The reason for this state is still in the large presence of classic organization and management which is based on obsolete and out of date technologies, as mechanic typing machines and calculators, using classic cameras and copier machines, communicating by male in classic writing, etc. Besides technology the reason should be searched in obsolete methods of decision making and managing in general, where intuition in strategic decision making still dominates the process. It is obvious that with this understanding of management and by using calculators one cannot compete with the companies that use modern informatics support, which is able to offer a high number of alternatives, and make a decision which management should accept, or transform into executive decision. [6]
In that way the next paradox happened that powerful informatics technologies are insufficiently applied where they can give the highest contribution in reaching corporative success and competitive advantage and that is top management. So, structures responsible for introducing strategic technology in the companies, marginalize it and thus by personal example influence its acceptance and application negatively. This paradox happens in other sectors, too. It shows that those who create laws and rules break them most.

3. USEFULNESS OF INTRODUCING IT IN TOP MANAGEMENT

Even though a lot is written about usefulness of introducing new information technologies before all the fact is that IT technology missed top management and it shows the need to actualize this question through two indisputable usages that appear on corporate level.
The first usefulness is in the fact that strategic competitive advantage may be achieved by application of informatics technology in top management while making strategic management decision, and that it cannot be achieved in executive jobs and at a level of data gathering and selection as these jobs are simple. In modern conditions al the organizations, even those that function on natural basis more or less use IT in these operative executive jobs. So the new challenge is a chance to apply IT on strategic level in the process of strategic decision making and putting information technology into function of fast data transformation into information, and these into knowledge as most useful corporative potential.
This would create conditions that companies are not only a place of acquiring, transfer, storing and using knowledge and places to gain wisdom, as it is shown that knowledgeable become wise faster than those who do not have any knowledge at all. This applies a chance and a challenge that top management deals first with managing knowledge not data, electronic communications, etc. It is shown that intensive usage of IT on this level can bring competitive advantage, especially when the speed and quality of decision making is in question. The most number of successful corporations turn towards this step of trying to introduce permanent innovations and improvements.
The second reason and answer to a stated challenge is that dominancy of IT usage on top management level act as a personal example and stimulus for introducing IT and even more intensive usage all around the organization. Personal example here has a larger effect, as employees listen what managers say but practice shows that they behave in a way their top managers do. This fact is important as top management makes the decision of introducing information technology as strategic technology information and it would not be logical to ask others to use it without the "brain of the company" using it.
New challenges specially show the need to compare management of undeveloped countries and transition countries and the need to introduce and use information technology and Internet. This is a fundamental innovation that undeveloped countries management will face sooner or later, and who as a rule follows what happens in technologically developed countries. It is certain that insufficient application of IT in developing countries and transition countries, decreases the efficiency of the Internet as a global network which damages interests of undeveloped but also of developed countries, as it is obvious that the importance of information technologies and before all the Internet is increased by spreading net to net. If underdeveloped and transition

countries do not have developed Internet infrastructure that decreases Internet success in developed countries, too.
In previous context we should understand the challenges of the state and companies when The Republic of Serbia is considered. Namely, the Republic of Serbia in the following period can expect deideologization, or departization at one side and professionalization of corporative and public management at the other side. This will be a radical change for Serbia, even though professionalization and superprofesionalization have existed for more than half a century in developed countries. [7] After stated, it is needed to create politically and legal and economic and technical conditions to provoke introduction of information technology. In this plan there is a demonopolization of Internet space, preventing control of internet communication, electronization of state and public service administration, for purposes of creating a public service to be used by the citizens. This change would mean starting democratization of Serbia as it is proved that the internet cannot be ordered what to do and cannot be controlled or the control can be very difficult.
We should bear in mind that introducing information technology is a smaller problem for corporations even if they lack financial funding. A far greater problem is to grasp a need to introduce new technologies or those mechanisms which will enable less but smarter work. Resistance towards introducing information technologies is in direct proportion to the age and technical culture of the individual. The more educated a person is the less resistance will he have towards new information technologies, and vice versa. The direction of acting can be seen from this. If we want to improve this area and create conditions to accept information technologies it is necessary to improve education level of the citizens and increase the level of technical culture.
An innovation or a challenge which will face state or corporative management is in changing of centre of action in some spheres of managing information technology. The point of the last period was to find information as an obligatory element of every organization. Information technology was created out of a need for fast and reliable information and its storing and keeping as a secret, especially in the area of high technologies. So, general aim was to find information and keep it a secret to be used for achieving competitive advantage. Through technology solutions a relatively satisfying result was achieved. This need will also be of most importance in the future.
But in the following period we should expect that a higher importance will be given to keeping, preserving and using the information and its transformation into a scientific information or knowledge, which should be in function of lifelong learning of each employee and a company as a whole. In that context the accent will be on fast learning and transfer and also using so called tacit (invisible, or knowledge in the individual employees' heads.). As a matter of fact competency is the only competitive advantage which companies can achieve on strategic level. [8]
The other problem of the managers at all levels and projecting engineers and construstors of information technology is preventing computing criminal, identity stealing and including ethics in using information technologies, especially Internet. Each of the above stated problems individually and all of them together require participating not only of corporative but also national and global level, with large investments and also actions in educating employees and population, to prevent unwanted consequences brought by information technology.
From partly stated facts we can conclude that this deals with challenges which will ask for fast and quality answer of all the relevant factors which take part in business and life in general. We should add here one more alpha plus, and that is service sector that will represent extremely available area for application and development of information technology in the future.

4. NECESSITY OF HIGHER IT APPLICATION IN SEVICE SECTOR

Investigating influence of information technologies and The Internet on corporative services by all criteria represents a challenge which overcomes the boundaries and possibilities of a scientific work. Introducing information technologies and the Internet in service sector is difficult because of the specific features of the service itself and because of ever growing IT sophistication. Both facts in fact change dynamics of change and happenings before all with people who should be the bearers of the change. This changes organization design and abolish deep military organization structure that has been applied for a long time and was aimed at managers mainly as central points of organization systems.
By introducing Internet as net of a net, organization gap is decreased, classic division to the centre and peripheral parts is cancelled. In a net whatever it might be each unit is important and increasing number of units in a net increases net power. Regardless the fact that information technologies have not found a higher usage in service sector their application has already shown some difficulties.

4.1. Difficulties in IT application in service sector

Service sector is the youngest and at the same time the least famous or theoretically shaped part of each national economy. This fact shows considerable influences to all the elements of service sector. Practice shows that organization and informatics designing is mostly performed on knowledges and theoretic assumptions of primary and secondary sector. It is clear that each seed does not grow on each ground and that it is necessary to formulate models theoretically which can be introduced into service sector which has certain specifics comparing to other traditional sectors.

One should not disregard insufficient development of service economics as a basic science out of which other discipline branches should be developed as: management and marketing in services, service financing, bookkeeping and expense control, information systems in services, etc. This constitution especially applies to comparing service science to economic of industry which exists for almost a century and which has already formulated certain scientific rules in the sphere of management and organization, measuring results and building simulative systems that provoke employees to achieve higher effects. [9]

Difficulties in IT application grow out of stereotypes. Practice shows that a part of a problem at IT introduction into a sector of services comes out of a traditional understanding that service sector is impossible to mechanize and where it is possible is often pinpointed that mechanization would give appropriate result. So, follower of this idea say that the service is best done with “two hands and on two legs”, or by live work. Examples of hairdressing and cosmetic salons, health, culture, fun and other institution are often taken as typical cases where it is hard and sometimes impossible to mechanize their functioning. Practical solutions of some service companies show that service processes can be mechanized and that it will be more and more possible in the future. Typical examples are tourist, hotel keeping, traffic industry to health sector, culture and art institutions, public management, etc.

The difference of the tertiary sector is an obstacle or a difficulty in introducing informatics technology. The difference shows at service giver and supplier. This difficulty is a result of differences among people because there are no two same men on earth, and as a consequence no two same needs or wishes. It shows that some services are touchable or invisible, short and perishable. Other services are completely opposite and can be felt, seen, they are long-lasting and can be stored as the fact is with electronic data or information.

Services differ in complexity, time of planning and time of performing. For example there are simple services as hairdressing, crafts, and very complex as surgery on nervous system, or organizing tourist space travel. Some services are short while others are done in phases and for a longer period of time.

Numerous services are composed out of goods delivery and service activity, so the goods is not delivered through classic selling but as an included according to a “key in your hand” principle. This trend of transforms producing into a service corporation but often producing activity dominates. Typical example for above stated is issuing a banking receipt with bank organization, or McDonalds hamburger delivery, investment activities that have a character of service, etc. That is why it is hard to define whether it is a producing or Service Company as there is a tendency that a large number of producing companies become service companies in time and sell produced goods as a part of a unique article.

The difference of organization systems makes generalizations in conclusions or rules harder. In other words, the following corporative systems deal with services: trading with their modalities (retail, mega trade, and angrodetailed), traffic, tourist and its subsystems (hotel keeping and entertainment), organizations dealing with banking and financial services, communication systems, education, propaganda, health, sport and recreation, culture and art, pubic services and public management. But it is obvious that services include crafts, parlours, agencies, lawyer offices, media houses, bookkeeping and consultant offices of individual and family type.

The problem is becoming more complex as in a group of services apart from profitable there are those which are not profitable. The difference between them is in the facts that firs organizations perform services to gain profit while with the others profit is not primary goal and they often oppose introducing management as a modern concept of organizing corporative systems. But in broader context the difference between profit and non-profit organizations does not exist especially when managing context is in question as each of them has to take care of economy of business or to satisfy as many as possible needs on limited resources. So, traditionally nonprintable organizations as for example health or social institutions and even humanitarian organizations in broader context have economic dimension which is final in each organizational system.

Apart from the high level of differences each service is unique and unrepeatable as each involves different people as users and service suppliers, , in different periods, in different places, etc. This applies even in conditions of service process standardization, considering that it deals with tangible assets. Out of the previously said we can conclude that managing service sector is more complex as it is known that working with people is the most difficult.

Stated and other difficulties and problems managers face and will face in the future will make the research difficult and also implementation of information technologies. Pessimistic people would see the biggest problem in this and that would be the biggest difficulty that meets unprofessional management and a problem of a larger part of the population. Management pessimism to adequately answer new changes creates conditions to see only problems and not chances and possibilities. If management goes by old concepts and technologies or ways of thinking than those are really problems as classical tools and models cannot help solve modern problems. Rigid and deep organizational structures, followed by hierocratic or amateur management are not capable of fast and quality reacting to changes in the surroundings or internal changes. In other words old knowledge, abilities and crafts cannot solve modern problems as present knowledge will not be able to solve problems of future.

4.2. Technologization and informatization in service sector

In modern conditions technique and technology became key factors of success of each society and corporative organizations. They became important catalizator of business systems for achieving competitive advantage and offering satisfaction to product buyers or service users. For the above stated corporative systems were forced to include technology innovation which will increase the quality of service, improve productivity and efficacy, increase customer's wellbeing and pleasure.

Even though some difficulties appeared in applying information technologies and services, technologization caught this sector with a tendency to mechanize a large number of operations with offering and using services.

Technology eliminated or marginalized human resources in a large number of cases and decrease influence of human potential upon general productivity and wellbeing of society.

A few decades ago in USA agriculture 50% of the total number of the employed were employed. This number hardly made enough food to satisfy their own needs let alone for export. Today USA agriculture employs around 5% from the total population and they enable multiple export of agriculture goods. The reason for this state should be looked for in the fact that modern agro technical and agrochemical means and other were applied. So, techniques and technology became key or one of the key factors in defining development and life standard in a country.

We should bear in mind that no technology is designed for one sector only, for primary, secondary or service sector, but can be applied into other sectors and branches according to principles of adjustment. Thus technologies get more or less universal character and the level of technology application in some sectors or branches will depend on the ability to adjust. If management does this "transplant" successfully a significant competitive advantage over competition should be expected. But, here we should bear in mind that technology in itself can not mean advantage over competition. What characterizes winning technology and organization strategy is *application of inventive strategic technologies.*

Because of that mangers who deal with offering service must be technologically competent and must have awareness of what technology can do here and now and how can it be used as a strategy instrument in managing in future. This specially applies to the IT which includes Internet.

Thanks to increased technical culture and the growing race with time, even loyal clients become aware of technological possibilities and expect companies to enable users easier availability of service. They lean towards Internet using companies. Service users in modern conditions are not ready to forgive mistakes of service personnel. But during times when Internet was not used clients didn't react to eventual mistakes concerning reservation, late interest tax calculation, wrongly issued ticket or transport reservation, wrong term of a meeting, etc. Clients know the possibilities of technology and often react to mistakes which appear in service giving process. So, technological innovations make it easier but are obligatory as they raise responsibility to a higher level compared to classical business.

4.3. Internet and "technology flourishing" of the service sector

Beginning of the third millennium in technical technology since introduced a century of technological improvement and flourish in all the segments of economy and society at a global, but also national and corporative level. Statistics show that in the last 120 years productivity in industrial production, mining, agriculture, construction and transport developed in developed countries 3-4% a year. According to this these branches achieved 45 times bigger growth that dramatically enlarged payment capability and life standard of the citizens, and made easier approach to education, health, culture, sport and other systems offering services. Even though the growth of stated areas will continue it seems that the revolution in productivity increases close to the end. All the areas of life and work have become extensive more or less, and dominated by a lesser number of employed and large presence of technique and technology became a rule.

Special contribution to improving business of business systems was given by the Internet. Any data on internet users number, in family or corporative organizations would be more an estimation than a correct data. Real estimations say that internet user number is doubled every hundred days, which shows exponential growth of internet using segments in all the segments of economy and society.

Technology application and especially information technology application and the Internet in service sector today are a condition for service organizations survival. IT are especially used as a special means of efficacy improvement in offering services, and collective effort is growing bigger and stronger of all the aspects of hired company whether operative, marketing, human, financial or other activities and sectors are in question. Intensive growth of IT and Internet application in services can be seen through on-line service user number represented by "business to business" techniques ("B2B"), and "business to consumer" (B2C) service. Estimation was that in

1999. The Internet was used by over three million traders and it is estimated that there are 30 million users today. The measure of growth explosion can be seen from the following constitution: If cars developed as computers did, today Rolls-Royce would cost a 100$, it would use 100 litters of petrol per a million kilometres, explode once a year and kill everybody inside". [10]
Service performers are aware of the advantages given by the Internet. Service users are becoming more and more aware of the same fact but also opposes to the Internet. Many business partners condition doing business by using the Internet or by existence of a WEB page of the partner. Potential buyers or consumers of some types of services are also aware of the Internet advantages in different spheres of offering and consuming service process. Practice showed that computerized systems for aviotransport reservation or lodging in hotel systems are more reliable and make fewer mistakes when double reservation or seats are in question, they decrease conflicts on service giver –service consumer relation. "Human mistake" has decreased to the minimum with a tendency to be completely eliminated. This is a simple example but rightly illustrated to show Internet advantages in relation to customer satisfaction and also satisfaction of service providing organization.
So, avio or other types of transport, banking services, hotel lodging are more or less standardized and there are no important differences with different systems whether aeroplane types or physical banking or hotel object types, food and other tourist contents are in question. What can be a significant competition advantage is a way by which the company offers services, does reservations, and does transfer or payment, communicated with clients etc. This means that here, physical product is marginalized and that service is taken into consideration before all that has no objective criteria by which to mark a quality. But criterion of customer satisfaction however subjective it might be it is the most important and most objective for service sector management.
Users in modern conditions are not technologically illiterate as it was in the past. Today, technology literacy is not a privilege of the elite and aristocrats. Service users mostly know all the possibilities in technology world of today. So the Internet represents a chance and a challenge for the largest number of individuals and corporative organizations which apply it and in it they see a strong pole in achieving strategic competition advantage. At the same time it is a threat for those who marginalize it. Thus, service organizations transformed from manual into high technology organizations whether they offer or use service. They are able to offer their users, employees, and other constituents additional uses and satisfactions comparing to traditional organisations on their way to a museum more and more every day.

4.4. „High feeling" and "high technology"

By accepting different forms of technology companies who offer services increased user perception in comparison to relative value of many offers for service supply. Service industry has been transformed from traditionally manual and low tech and technology industry into a global industry which uses technology to unite "high feeling" and "high technological effect" – thus enabling benefits to the users, employees and the company itself. That is why service companies invest more and more in this factor of business which is supposed to enlarge productivity and pleasure at all the constituents of organization.
Research of hotel systems in USA, Asia and Europe done by "Hotel" magazine in 1998 showed that an average hotel spent between 50000US$ and 249000US$ on technology in the previous five years and that increase of this growth is expected in the following five years. Thus drastic redesigning of hotel buildings happens, where technology took many functions previously done by men. It shows that a reception desk was eliminated in a large number of hotels, as a traditional "heart" of each hotel, that perimeter protection eliminated porters and intelligent card given to a guest when entering the hotel became main tool in the hands of a guest to use pool, bar and other contents. So, if the company wants organizational structure not to be an obstacle in successful application of technology innovation it must redesign and if introducing information technologies it is necessary to do radical changes or organizational reengineering process.
Similar situation happens in banking, traffic, health and other service supply organizations. Clients today became more and more demanding and justly expect higher level of service. That is why service systems have an imperative to answer these requirements by finding the way to offer higher quality to their users by using modern technology before all, but with lower prices as much as possible. By this relationships between service organizations and their users, suppliers, sellers and employees brought to a higher level of quality. The usage of e-mail and websites, getting information, making reservations, electronic payment, e-governments, electronic banking, virtual tourism, education and learning from a distance, etc.
Internet in general improved security of employed and enabled young and inexperienced to make decisions faster which refer to solving problems with clients. So, gathering, analyses, digital storing of easily available information in service organizations, became a powerful tool in making operative managing decisions. Internet can also help in important information exchange, between different sectors and service organizations as well as among different levels of personnel. This can influence faster and better decision making inside information. Information technology cannot make a bad manager into a good one, but it can help good manager to be even better and bad manager get even worse. Technology should be used as a tool to increase the employee eficacy

well as efficacy of the whole system – which in the end influences customer satisfaction. At the other side it searches for employees who are motivated and trained for data gathering. For example in La Mansion Del Rio Hotel in San Antonio, USA, the employees are trained to gather information on wishes of users for their data base. This is additionally analysed and used in the initiatives aimed at a user inside a hotel, especially when we talk about: "the same room", a view to the sea", "newspaper delivery", birthday greeting" etc. For regular guests who mostly use the same hotel for holiday and fun. [11]
Fast food firm Taco Bell has the policy of using information technology with an aim to create surroundings fast which is characterized by knowledge availability, decreasing managerial hierarchy and increasing employee power. By using informational technology in this way Taco Bell has an aim to achieve productivity improvement, freshness of the product, faster service and performing service in the correct way each time. This technology enables to collect a relevant number of data about each client, store them in a base and use them when necessary. Individuals are often surprised when they realize that Taco Bell knows what they want when they visit next time, but there is no place for a surprise as information technology enabled services to be performed massively at principles of individual satisfying wishes of every client.
Technology so proves itself as an efficient way of supporting organizations for offering services aimed at users and may empower its users to get what they want. But technology in modern conditions should be a servant not the lord. It was the lord for a long time in classical organizations consepted by the engineers before all (Fajol, Tejlor, Ford, Emerson) and who saw basis of every improvement and development in technology.
Creative use of technology and IT in different firms for offering services has a possibility to increase effects, decrease costs and maximize service supply process efficiency, because of which it is considered to be efficient support. As stated by Porter: "It is not the question of whether we should use the Internet but how to use it profitable".

5. CONCLUSION

Previous analyses showed and proved that information technology is a powerful tool for increasing personal, corporative and national success. Differently from earlier technologies which tried to decrease muscle strength, informatics technology is constructed to decrease efforts of human intellect. In that way it creates conditions for a man to lessen intellect labour and effort and to spend time creating ideas specific to human kind only as the only conscious living being. Ideas represent the most valuable potential, and companies which create conditions for creating a large number of ideas are as a rule more successful. According to the stated information technology creates conditions for idea creation but cannot create ideas by itself nor it ever will. This constitution applies to conditions when "Neuron networks" are in question as analogy of human neocortex.
Here we stated the problems which appear and which will be more dynamic in future and the ways of their solutions. Insufficient application of information technologies on top management level and eliminating or marginalization of middle management as well as insufficient introduction of information technology in service processes are certainly problems which decrease corporative success.
But, these areas create the biggest chance for more intensive application of information technologies. To make it happen it is necessary to create consciousness about the necessity of using these new technologies, or philosophy where men will work less but smarter. There informational technology can contribute significantly.

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DEBTS OF THE REPUBLIC OF SERBIA AND FOREIGN DEBT SUSTAINABILITY

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Suumary: *The deverb on the sector of economic relation with the foreign countries are very discontented and always are aggravated. It is always related on the deficit of the payment balance account and foreign debt according to the abroad. The deverb of Serbia according to the abroad and the height of its outside debt after this last financial crisis becomes one of the leading problems. This separately comes to the expression in the conditions of world financial crises, when the entrance of the money markets and capital will be more difficult from one side, and deverb of the direct foreign investment, of the second side. To this point it is actually to add the less income of the private property of enterprises, and the situation with the abroad liquid of Serbia is making difficult. In spite of to this problem does`n serve the big attention the economics and social consequences will be much higher. It is normally to continue with the begin reforms and speed up the process of the privatizations, to continue active work on the attraction of the foreign direct investments and deverb of the state consumption.*

Key words: *deficit of the current balance of payment, foreign debt, stranger direct investment, the balance capital, export, competition*

1. INTRODUCTION

Trends in the sector of economic relations with foreign countries are poor and are constantly aggravate. This primarily refers to the deficit of current transactions as well as an increase in debt to foreign countries. This, moreover, show, and the recent evaluation of the IMF according to which a further deficit of current transactions with foreign countries has become the biggest problem of Serbia, and the height of the foreign debt one of the three great problems. If these problems do not worship the maximum attention of economic and social consequences will be, said the most disastrous.
The aim of this paper is to point out a) on the genesis and causes of external debt, b) the consequences that may occur in the coming years, c) to propose some measures whose implementation would be decreasing the problems in this field.

2. CAUSES OF OUTER DEBT OF REPUBLIC OF SERBIA

During the sanctions of the UN Security Council, September 1992, although Serbia is not used for new loans and loans, all international financial institutions, the Paris Club, London Club and other creditors have still made regular and penalty interest on all foreign debts. So at the end of 2000 year, its foreign debt reached 10,830 billion dollars, and that the debt was 9:35 billion dollars. How that is the gross domestic product Serbia was only about ten, and export of goods and services only slightly over two billion dollars, Serbia is the level of debt was in the group of ten most debited countries.
The beginning of 2001 year, Serbia has accepted the suggestions of international financial organizations, primarily the IMF and the World Bank, i.e. began to force economic reforms and economic policies which had lead to escalating deficit ongoing transactions with foreign countries. This is especially contributed to the accepted concept of a fixed exchange rate, and the drastic liberalization of imports, which is de stimulated export and import stimulated and led to the foreign trade deficit and the deficit of current transactions. The increase of

these two deficits in 2001 and 2002 the consequences are, above all, the huge appreciation of exchange rate of the dinar and the excessive liberalization of imports realized mid-2001 year.
Although the external debt of Serbia at the end of 2002 year amounted to 11:13 billion dollars on the carriers of economic policy as such is not much concern. Since then occurred up to 51% debt write-off, as well as with the Paris Club in 2002 year will be any arrangements it costs 15% more debt when you have successfully completed a three-year arrangement with IMF on extended financing. The middle of 2002 and 51% after write-off debt to the Paris Club, the IMF experts have created a possible scenario, the sustainability of external debt for the period 2002.-2010. year. In this scenario was designed, since 2002. and ending with 2010 year, much more dramatic growth of exports from imports, which would result given that the 2003 systematically reduce the deficit of current transactions with foreign countries from 1722 to 2003 only 914 million dollars in 2010 year. In addition, the result would be: on the basis of a service) reducing the maximum amount of external debt of 10:13 billion dollars in 2004 year to 8.9 billion in 2010 year and b) growth of foreign exchange expenditures on the basis of servicing the foreign debt with 467 million dollars in 2003 year to 1630 million in 2009 year (Table 1).

Table 1: Scenario of the IMF and the sustainability of external debt of the Republic of Serbia and Montenegro in the period 2003-2010 year (*Source: IMF, 2002*)

	2003	2004	2005	2006	2007	2008	2009	2010
Growth of exports in dollars	16,4%	16,4%	15,0%	13,0%	11,0%	10,3%	10,3%	9,5%
Growth of imports in dollars	9,9%	8,3%	8,1%	7,0%	6,4%	6,3%	6,3%	6,3%
Deficit of current transactions with foreign countries (in millions of dollars, without donations)	1.722	1.623	1.449	1.636	1.282	1.176	1.139	914
External debt (in billions of dollars)	9,397	10,130	9,706	9,840	9,780	9,472	9,036	8,908
Repayment of foreign debt (in millions of dollars)	467	719	852	1.107	1.315	1.512	1.630	1.308

In this paper, the IMF experts are still pointed to the possibility of serious problems of foreign liquidity in the following cases:
• Slower growth of GDP and 8% annually,
• Slower growth of exports and foreign direct investment.
Despite the above mentioned warning, they have remained in positions of basic scenarios that involve slow import growth, dynamic growth of exports and of foreign direct investment, and are designed additional loan and loans in the first years of the specified period. They are expected to be in another decade to get to that repayment be greater than the new debit, which for the end result was the reduction of the absolute level of external debt to just 8.9 billion dollars in 2010 year.
When we talk about 2004 year, or on the movement of the foreign debt of Serbia, it should be noted that in the year finally concluded an agreement with London Club creditors on debt write-off 62% of Serbia and Montenegro to the institution. However, in addition, primarily due to falling value of dollars, external debt at the end of December 2004 year amounted to 14.1 billion dollars, i.e. was for 3.8% higher than at the end of the previous year, ie 30.18% higher than it was at the end of 2000 year.
Thus, after 62% debt write-off of Serbia and Montenegro's foreign debts and external debt of Serbia at the end of 2004 and in early 2005 year grows. Many economists then pointed out that there is a huge risk of further easy irresponsible debit abroad and threatens a real danger going in the debt crisis [9].
How is the issue of external debt was in the center of attention and foreign institutions, and says the fact that in the fall of 2005. The annual report of the experts the European Bank for Reconstruction and Development stated that the biggest problem of Serbia-high inflation and high external debt, and high amount of annuities, which should be provided for servicing the debt (EBRD, 2005. p.96). Despite the write-off of about four billion dollars by Paris Club and London Club, which is published in the period 2001.-2004., External debt, expressed in dollars was at the end of 2005 year 42.8% higher than in 2000 year, i.e. 9.7% higher than at the end of 2004 year. When it should be noted that in 2005 the value of dollar in relation to the euro and other currencies sensibly increased in comparison with the end of 2004 year, which resulted in less growth of their foreign debt in U.S. dollars, but what he really was.
Quantitative ratio of external debt of Serbia, GDP and exports in the period 2000-2008 The following table shows.

In the period 2000-2008 years of foreign debt, i.e. his participation in the gross domestic product has been ranging from 63% (in the 2006th year.) up to 125% (in the 2000th year). Quantitative ratio of external debt of Serbia and the value of exports of goods and services in the same period has been ranging from 228% (in the 2006th year) to 524.2% (in 2000 year.). In other words, by this criterion is in Serbia over the period was a highly responsible country. How the position of Serbia is was a bad show and comparative data of the foreign debt and export of goods and services in other countries in transition. For example, in 2005 year, the quantitative ratio was 116.9% in Poland, Bulgaria, 107.2%, 105.6% Hungary, Slovenia, 105.0%, Romania 93.9%, Slovakia 73.8% and the Czech Republic 51.4% (NBS , 2006. p.81).

Total external debt of Serbia in the first six months of 2008 has increased in relation to the end of 2007 year to 4.82% and amounted to 18,646.64 million euros. Public sector debt amounted to 6,047.24 million dollars, and to participate in the overall long is 32.43%. This debt was reduced by 1.36%. The private sector increased its debt to 8.6% and reached 12,599.40 million, which represents a participation of 67.57%. In the same period, debt to banks abroad amounted to 3,101.73 million euros and the same was reduced by 21.7%. On the other hand, external debt is increased by 23.43%, reaching 9497.67 million and total foreign participation in the long of 50.4%. This sector is in the first six months of 2008 year used 1,723.4 million of long-term foreign and middle-term loans. Total use of foreign loans amounted to 2,142.80 million, while at the same time squared 979.10 million 284.69 million principal and interest. It can be said that there is a tendency paying back in banking sector, while on the other side of long growing companies.

Table 2. Foreign debt of the Republic of Serbia (*Source: data from RZS, ZS i NBS Statistički bilten 2008*)

Year	ino-debt in milion $	Long-term and short-term debt	Middle-term dept	Clearing debt	ino-debt according to GDP	ino-debt according to export
2000	10.829,7	9.467,7	1.153,0	209,0	125,2%	524,2%
2001	11.124,8	9.916,0	1.025,7	183,0	108,3%	456,9%
2002	11.229,5	10.026,0	1.020,2	182,5	78,6%	379,2%
2003	13.574,9	12.336,8	1.055,7	182,5	71,1%	343,0%
2004	14.099,0	12.918,0	999,0	182,0	63,7%	272,1%
2005	15.467,0	14.018,0	1.343,0	106,0	64,0%	240,8%
2006	19.605,7	17.842,0	1.657,2	105,8	63,0%	228,0%
2007	26.235,9	24.181,8	1.948,3	105,8	105,2%	296,1%
2008/feb	26.979,6	25.471,7	1.402,2	105,8	105,8%	

Table 3. Gross domestic product of the Republic of Serbia (*Source za Platni bilans: Statistički bilten NBS, februar 2008; Source for GDP: Statistički godišnjak 2006. RZS for period from 2001. to 2007. godine, Saopštenja RZS za 2008*)

	2001	2002	2003	2004	2005	2006
BDP in million $	9.426,8	10.968,0	15.075,7	17.720,8	17.500,0	22.539,0
Share of export in GDP u %	19	20	22	23	23	21
Deficit of payments balance in GDP u %	3,1	11,4	9,4	16,2	12,7	13,0

3. CONSEQUENCES WHICH MAY OCCUR BECAUSE OF HIGH DEBTS

It is evident that Serbia will have major problems with the balance of payments, and its funding because of absenteeism predicted volume of foreign support and foreign investment inflows. While in the first half of 2007 the basic source for deficit financing of the current balance was a surplus on investment positions (direct and portfolio) and trade credits and new debts in the sum have the same significance as well as investments in the first half of 2008 year due to high increase in the current account deficit of balance of payments, and the reduced inflow of investment and new loans, a significant part of the deficit had to be covered by the reduction of foreign exchange funds on the accounts of commercial banks and the reduction of foreign exchange reserves.

In 2007 year there is a deterioration of the structure of the net inflow of capital is increased use of long-term loans and middle-term for 1.3 billion dollars (but, because of increased credit, reduced the net inflow of these loans to approximately 300 million dollars), a net inflow of foreign investment is reduced for dollars. Also

billion in the second half year 2007 year is no partial compensation smaller inflow of direct investment by increasing the inflow of portfolio investment [1].
The growing inflow of foreign direct investments 11 billion dollars in the period 2000.-2007, or 35% capital surplus in the same period) due primarily privatization. This means that the prevailing inflow of foreign direct investment achieved sales of domestic companies, while the lower part of the inflow of new investments (Greenfield investment). Bearing in mind that Serbia is facing the end of privatization of socially-owned companies in 2008 year and privatization of public enterprises by 2010. year, as well as the world financial crisis that occurred in 2008 year, the money will be less and it will all be expensive.

Table 4: Capital account of the Republic of Serbia 2000-2007 year. (*Source:* www.nbs.rs *25.02.2008*)

(u million dollar)	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
II. Capital and financial transactions	339	788	2.048	2.518	3.089	4.720	9.716	8.369
A. Capital transactions	-	-	-	-	-	-	859	-410
B. Financial transaction	339	788	2.048	2.518	3.089	4.720	8.858	8.779
1. Foreign direct investments, net	50	165	475	1.365	966	1.550	4,264	2,195
2. Portfolio investments, net	-	-	-	-	-	-	450	911
3. Middle and long-term credits, net	234	216	680	997	1.560	2.198	2.864	4.214
3.1 Usage	245	265	756	1.189	2.171	2.959	5.466	7.336
3.2 Repayment	-11	-49	-76	-192	-611	-761	-2.602	-3.122
3.2.1 early repayment of principal and interest	-	-	-	-	-	-	-1.135	-70
4. Credits given to foreign, net	-	-	-	-	-	-	-	-27
5. Short-term credits and deposits, net	30	73	158	66	449	439	93	720
6. Other	25	622	801	95	68	423	1.150	1.829
7. Commercial banks, net	/	-288	-66	-5	46	128	-5	-1.063
III. Errors and failures, net	41	-1	127	-177	228	-469	-328	-258
IV. Total balance	227	502	928	921	448	2.027	5.422	1.222
V. NBS foreign exchange reserves, the net increase	-227	-522	-928	-921	-448	-2.027	-5.422	-1.222

Financial crisis will have a negative impact on the capital market, and debts of countries. Home financial crisis of the year 1970.-is an integral part of chronic and diverse, but unrelated, instability conjectures real economy. Phenomena that are repeated and that we come here again, is: "a wide range of speculation on the price of assets, determined the importance of credit financing of purchases of financial securities and real estate, international expansion of ... Processes that we previously identified-disorders in the inter-placements, the spread between financial market, deterioration of the quality of credit in connection with real estate speculation with-analytical element which can be connected to the Historic episode" [11]. UKTAD also estimated that investment in the world in the next three years, reduced, and they are an important Source of foreign capital that would be covered a huge current account deficit of balance of payments. Although divided opinion in our country about the impact of financial crisis in our economy, there is no doubt that the crisis over bank loans that will rise in price due to lack of money, a negative effect. If absent Greenfield investment, it will cause a narrowing deficit forced through restrictions on imports with all the negative consequences on the production because of high import dependence. Negative effects of world financial crisis at the end of 2008 already are expressed in declining exports, increasing the current balance of payments deficit and growing debt to foreign countries.
Redrawn significant amount of loans by 2004 year related to the commercial banks, which borrowed funds on the foreign exchange market into dinars and used for crediting the population and companies. Problems will probably occur when commercial banks are back these loans, because they will then occur on the foreign exchange market with CSD who want to convert to foreign currencies. This may be a significant impact on the domestic foreign exchange reserves, a happy circumstance is that the participation of short-term loans in the total amount of new loans in the period 2001.-2007 years, only 9.1%, so that still there is no short-term risks for the balance of payment due to the potential for escape of foreign capital from speculative reasons. Long-term speaking, in the coming period due to higher annuities to foreign creditors, that the level of foreign reserves must be sufficient for this, and common import needs.
Growth of debt Serbia abroad increased the sensitivity to exchange rate changes. Exchange rate system, alleged market regulation, conceal the use of strengthening the values of CSD for cheaper imports for the purpose of

overcoming inflation, which is an effective method for this, when a large part of domestic product is spent on imports, financed debts and selling assets [8].

4. CONCLUSION

Further deficit of current account balance of payments Serbia is the biggest problem, and the height of the foreign debt one of the three great problems. This deficit increases, but for now covers achieved surplus that is realized on the capital account. The surplus appears by a net inflow of investment, but even more by increasing the foreign debt to foreign countries. However, should bear in mind that this will reduce the surplus and all the more closer to the use of foreign currency reserves to pay abroad. In addition, foreign exchange reserves are more and more used in the defense of national currency rate. Also receive and acceptable limits of public and private debt abroad. In both cases, the need for servicing foreign currency liquidity and investments that are made in previous years will begin pay dividends. All of this warns on the increased risks of foreign currency liquidity of Serbia, if current trends continue inflows and outflows in the balance of payments Serbia.
Weaknesses of the exchange rate have already started to manifest and is characterized by rapid oscillations that are not the result of market factors. Aspersion of exchange rate of the dinar has hidden the use of strengthening the values of CSD for cheaper imports for the purpose of overcoming inflation, but it dissimulated and decreased export competitiveness of our exporters. Spending a large part of gross domestic product in the import was possible because it is financed debts and selling assets in the privatization process. This way of financing increases the risk of liquidity when foreign capital inevitably moves to net outflows.
High current balance of payments deficit and high foreign indebtedness of Serbia are two basic problems that economic policy in the coming period must be solved. In that sense, it is necessary to take the following measures. The first measure is the continuation of reforms and rapid completion of privatization, which should enable the economy to increase efficiency and greater savings. The second measure is the active work on attracting foreign direct investments, especially new or Greenfield investment. Bearing in mind that the prevailing part of inflows of foreign direct investment achieved through privatization, he could not even expect their stronger impact on economic growth and exports. Revenues from privatization, which is the capital account, in addition to debit in the world, well covered in the current account deficit of balance of payments and funded debts, it will be run. Therefore, it is a Greenfield investment extremely large. The third measure would be a gradual reduction of state spending. States must work hard to increase their savings and lessen pressure on the trade deficit, as well as to leave more room for private sector investment, and consumption. Realization of the above mentioned measures should lead to normal debit that would be, primarily, in the function of the increase in production, imports of modern equipment and increase the competitive ability of our exporters.

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FROM SMALL COMPANY TO BUSINESS SYSTEM, STRATEGY OF RAPID DEVELOPMENT

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Summary: *Modern market business in the developed economies is largely based on the activities of organizations that belong to the sector of small and middle size companies. Guidance on the processes in these companies, the chain of activities that lead to the end, the final results, which represent their market offer, products or services, some of the aspects which the authors of the study dealing with the strategy changes of small enterprises, which leads to the acceleration of development and creating market capable of business systems.*

Keywords: strategy, process, development, business, change, business system

1. INTRODUCTION

Strategic development of small and medium-sized enterprises, based on the business philosophy guided to process, is the foundation of companies of tomorrow. The dynamic growth and development of this sector, taking into account the need for improvement and development of partnership relations between SME's (small and medium-sized enterprises) with a large and public companies, as well as the need to support the strategy of improving the processes within companies or replacement (process-redesign) coming from the general and the business environment . Strategist's the process of change in economic structure and the structure of companies in the market, this sector have been delegated the role of carrier of economic development, the key factors of influence to generate new, first of all, the innovative, new jobs, creating Gross Domestic Product (GDP), export-oriented production and other values which are the foundations of business in the current conditions and future business.
There is general agreement known authors in the world in the theory of entrepreneurship to SMEs, in partnership with a large and public companies are the backbone of economic development, crucial to contribute to the increase of employment, competitiveness and innovation of products and services in the increasingly challenging market. Changing the structure of the business organization in the modern economy is focused towards creating a business fit, self sustainable new and fast growing organization. Growth and development organization in the modern market conditions is based on the strategy of analysis, improvement and redesign of the company, in order to create conditions for the realization of its strategic goals in the business environment in which the company operates. Organization to the new situation, after the change process, grant management functions of the organization in order to achieve a greater extent the potential effectiveness of the organization. Systems in which there is at least one subsystem with [2] property presents complex decision-making system. Decision-making is the basic component of effectuation of the organization, so that by Flejšmanu: Decision making is the choice of an alternative to using the law of circumstances. The system of decision-making author defines as a system which has the decision-making process.

2. PROCESSES IN NEW COMPANY

Making the production features a new, modern companies, requires the execution of base and supporting processes organized in a way that provides the required quality of TQM (Overall quality business) by the principle "of the need to change". How to get to the level of development of new production companies, which will ensure the required quality of their work, which ensures constantly improving the ability of organizations to understand the requirements and processes arising out of the company and respond to identified and unidentified customer requirements?
To what extent is required based development of new companies in the process try to perceive in the context of understanding of management processes for strategic development (management, improvement and introduction of new process to complete and improved implementation of the strategy). To manage the process of the executives or owners have the necessary knowledge about the process, why exist, how the process works and that the opportunities for improvement. To understand the needs of the election model strategy for accelerated development of production companies, the processes in this paper as well as business and manufacturing processes. On the next picture shows the scheme understanding the process of implementation of development strategies.

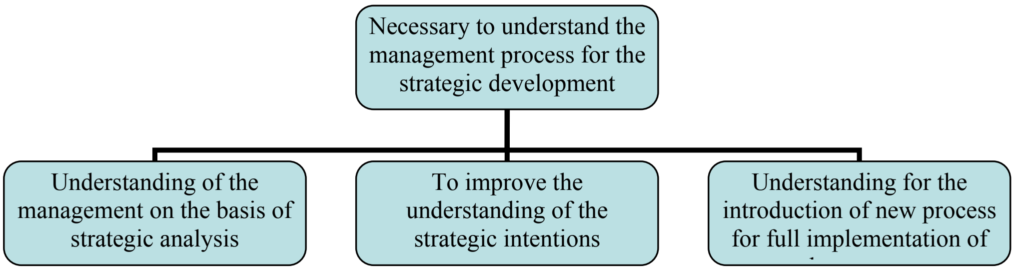

Figure 1: Management processes and requirements for understanding

Entrepreneurial process is complex, which in the opinion of many authors the complex character of Applied Science with a clear place in the hierarchy of other sciences. The essence of entrepreneurial process is that, starting from the identification of opportunities, and through the business processes, creates favorable effects of entrepreneurial projects. Processes in the production company converted the internal activities of the material and financial resources to the benefit of consumers, community, production organization and employees in it. Are different definitions of the author to author, but all basically agree to have the goal of creating value for customers and the organization and investors.
According to Kruger [6] four basic components of entrepreneurial process are: the development of business ideas, providing resources, the implementation of the business establishment, survival and growth. Strategic management in the company ensures the survival, growth and maximizes benefits.
Entrepreneurial process based on innovation Bygrav [13] viewed through four main activities: innovation, activating events, implementation and growth.
Harrington [12] defines process as: "one or more activities, taking the interior of the building, add new values, providing internal or external customers with the results. Processes are used organizational resources to ensure defined results".
Pall [17] defines process in the following way: "The logical organization of people, materials, energy, tools and procedures in order to descriptions of activities for the production of some specific results".
Olof Rentzhog [10] views process as a series of chain activities defined as: "chain activities in the backward flow creates value consumer".
Processes in the company are mutually related and difficult to classify them is what there are different views and attitudes of many theoreticians. Categorization process in the literature is done in making processes in different ways: Melan [18] makes processes in the two main types: Production processes and service processes. Harrington process linked to direct contact with the physical product and the name of the production process. And other processes in the company called business processes. Olof Rentzhog processes into a base and support. Basic process in the organization of production is carried out on the basis of already prepared and widely defined process that can meet general business ideas production organization. Supporting processes related to the partial interests of local importance and the present support and complement basic processes.

3. ENTREPRENEUR ADJUSTMENT AND BUSINESS PLAN

The need for recognition of the opportunities and fast response to companies taking advantage of opportunities in the market and show the results of the research that is carried out through interviews with founders 100 companies that have been on the Inc. list. "500" companies with the fastest growth in the United States in 1989 year. In an effort to provide job, entrepreneurs-respondents [14] invest little effort in their basic plans to:
• 41% has no business plan,
• 26% have only a primary draft plan,
• 5% of the developed business plans for investment,
• 28% has made a complete business plan.
The general conclusion of the research is that entrepreneurs do not give in formulated in the development of detailed plans from the "good reasons". The ability of organizations to survive in the market turbulent business, plans to invent ourselves and adapt to current situations have advantages over solid defined formal planning business.
The financial crisis in 2008 year that shook the financial market, banking system, the economy developed and especially developing countries could be more lethal for small business enterprises in terms of preserving the principle of clear and very specific way of planning that would promote "inadaptability the extent required" to "imposed stability in the business. Who is able to predict annual car sales fall for 25%, forced dismissal of the millions of workers who work in the automotive industry leading companies, and especially negative effects that a drop in production and sales of cars on the small cooperate companies. Dramatic changes were unexpectedly making unexpected difficulties not only as a consequence of reduced demand, providing availability of resources for the implementation started investment projects, investment in the development of new products, the introduction of new technology, innovation and improvement process in the organization.
What can change the development strategy of small companies if the entrepreneur and management do not recognize the threats and their weaknesses as well as the resulting opportunities and chances of companies on the market. It is without doubt that the response to sudden threats identified changes in the organization, which must come first, but on the principle of change predictive of the actions or management in the given conditions. "Possibilities for innovative strategies not springs from sterile analysis and crushed figures, one springs from the new and unusual experiences that can create opportunities for new consideration of an unusual [15].

4. ADMINISTRATIVE AND ENTREPRENEURIAL APPROACH TO STRATEGY OF SMALL COMPANY DEVELOPMENT

Due to increasing competition in the market and the pressure of incoming companies with international markets, with market experience and the ability to impose their products and services targeted group of its customers, created a distinct need for all stronger growth of the domestic SME sector. Changes in economic structure caused by restructuring public enterprises and social changes and ownership structure of social enterprises, generating the alarming unemployment, contributed to the closure of a number of companies and changes and coordination with other activities, guided orientation to market needs. Changes in the organizations managed by the founders and managers of different degrees of knowledge and with a very different experience in business management for small business. The growth of SME's sector component of the strategy of economic development of any economy, with the institutional support and incentives to their development earn special attention.
Strategy for the development of small and medium-sized enterprises is focused towards the realization of strategic goals of companies: product development and services in order to ensure the market position of a company, generated a profit and allow the development and growth that can contribute to social and economic development. GDP growth, create new jobs in the process of creation and implementation of new business, changes in the structure of production and domestic products in accordance with the requirements that come with the market, increasing competitiveness in the market, development of the region and reduction of regional differences, strengthening export some of main elements of strategy development of SME's and entrepreneurship. For the development of SME sector, it is necessary to create a good general and business environment, build and customize the development needs of the institutional framework to support the development of this sector, to provide adequate financial and non-financial support, in order to facilitate the growth and development of those companies that have market potential and development opportunity. Therefore, the development of small enterprises in the most sense can be talking to two starting points: the development of supported implementation of administrative and entrepreneurial decisions. What are the decisions important for the growth and development of the organization? The answer to this question is complex and in any case involves giving paramount importance, and both decisions. As a review based on the realization of the goals which they can achieve the changes that take place in the environment in the company, to be from a small

company created a strong organization with the elements and characteristics of the business system, it can ask a question that ways and strategies leading to the changes and the creation of fast growing, economic, efficient, competitive market, social and socially responsible organization - business system. **Ability of the organization characterized the functionality which transform imputes (**imputs, resources, and actions) u **outputs (**results, products). How do changes of strategy and changes in the SME sector see entrepreneurs, managers and companies and how state administration, which should support the growth of SME sector?

Access to those who make administrative decisions and entrepreneurs are in many ways different. Administrator of the decision-making is always based on the available resources (funds in the budget above all, strengths and weaknesses, threats coming from competitors, the impact of decisions on those on which their realization is reflected directly or indirectly). Entrepreneur decisions based on recognized or identified cases, the assessment used for the organization and stakeholders, the vision of the future state. Changes entrepreneur realized that motivated the creation of the specific environment: insufficiently predictable and with unknown threats that may instead use the organization to bring difficulties and unexpected problems. Despite threats with entrepreneurs dominates feeling searching for the realization that the organization will bring growth and development and of course profit.

Minzberg [14] saw the approach of the strategy of development through the author reviews the four main characteristics of:

- Domination of active search for new opportunities,
- Centralization of power in the hands of the manager, which controls the destiny of relying on its own power, charisma, and its final evaluation of feasibility,
- Dramatic jumps forward or backward in terms of business achievements, which are held in the conditions for the organization caused by business uncertainty,
- Growth is the dominant goal of business organizations motivated by the need for success more than anything.

For the successful management strategy of the development of small companies, it is necessary to synchronize strategy and strategic definition of the environment-business environment. The quality of strategic decisions often depends on the extent taken into account some important aspects of the environment. Insufficiently effective and weak strategy often arise as a consequence of not taking into account the conditions and circumstances that come from the middle. Management changes that the strategy is the development of the enterprise, must be considered as entrepreneurial aspect and the aspect of the business environment in which the company operates.

The objectives of management changes are not only respond to the challenges that come from the general and the business environment in order to survival in the market, but the conversion of changes in the capital, new work place and the provision of new development potential of the organization. How to recognize the need for timely changes in the organization, to respond to them and bring an adequate strategy for the achievement of goals that they wish to achieve change? I must be the absence of a strategy linked to the failed companies? To what extent should entrepreneur your business strategy to connect with institutional changes and support of SME sector, the way an entrepreneur and watching the process of change that you need to miss a business opportunity to meet the formal planning and strategic decision-making? These are just some of the open questions that entrepreneurs often do not seek answers in order to preserve the ability to frequently change jobs and activities which despise large and stable market companies. The focus of entrepreneurial interests aims to identify opportunities in the market for materialization of entrepreneurial ideas. Search for opportunities and the chance, to capitalization in the shortest possible time identified the opportunity and power, an entrepreneur in the second plan puts the planning and control operations and usually have over the issues of strategic importance for the development of the organization: the provision of continuous improvement and performance of products, improvement of production process technology , promotion and development of human resources, improve the quality of funds for financing business operations, internal organization, and the organization of special importance risks that carries a new job.

Advantages and opportunities of which products and services have market potential should be timely use but nerve and adjust the dynamic development of other resources to the process of growth and development organization, worked on the principles of economy, efficiency, profitability at both the short and long-term. The period of strong demand and the expansion of product on the market, generating income in the business, must be under heavy control of the company. Organizations need to create effective mechanisms of strategic control if they want to successfully implement its strategy. According to the Dess, Lumpkin and Eisner [1] in the mechanisms of strategic control include information control and control of behavior. Approach to control information can be in the "traditional" and modern way. Modern way is interactive in the process to monitor internal and external environment, which result in assessment of needs and changing innovations strategy. Dynamic changes in the environment and backwash organization market events impose the need for implementation of access control information and control behavior.

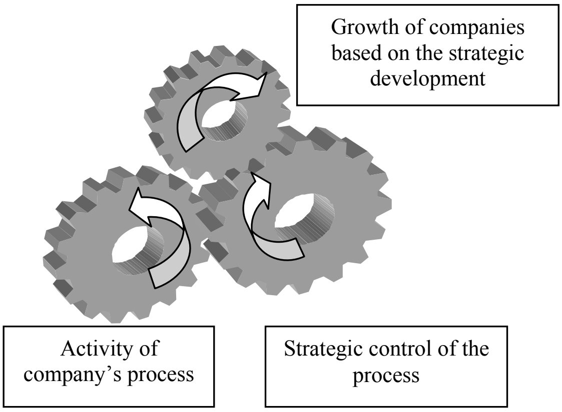

Figure 2: Illustration of business strategy through the relationship of control of business processes, business profit and company growth

Development organizations and enterprise management should be adapted to the changes that occur in the processes of the organization, changes in the environment and on the market. Recognize the opportunities that entrepreneurs and management companies as a chance for development and growth of the organization, leading to changes in an effort to take advantage of market opportunities and achieve the greater effectiveness and efficiency of operations, but carries on the business risk. Control operations on the modern way can contribute to reduce the risk of business.

5. BUSINESS ENVIRONMENT AND MARKET DEREGULATION AS A FACTOR OF STRATEGIC CHOICE

Depending on the number of jobs in the company on strategy can be seen as a strategy of companies or corporate strategy (business strategy development system). Manufacturing enterprise development strategies are developed depending on the conditions and freedom in the industry which the company belongs to [6]**.** Conditions in the implementation strategy for the scope of economic activities, the level of the system that are considered competent for economic development, and therefore the strategy for the development of classified systems: **micro, macro and meta** level [4]. The division of competence significant is because of strategic assessment and strategic choice. The development strategy of growth companies, and transferring the business system depends on the basic production program, in which technology is based, technical and innovative solutions, available resources, the level of tidiness and general and business environment which will be applied.

Micro or macro economic level network consists of companies or small companies, and at this level takes place the process of growth and development of small enterprises, which leads to creating business system. Development possibilities of the enterprise on the micro level largely depend on the development and accountability system on the macro and meta level. Target level refers to the entire system of values is of importance for the economy and integration in the world economy flows. To what extent features of the meta-level influence on the development on the micro level, or more precisely whether deregulation market in the target level of influence and to what extent the strategic development of small companies

Deregulation is a program of economic policy to reduce state restrictions, and control measures, and is to encourage competitive struggle in the economic branch, and in the market.

The crisis of financial markets in the United States as a result of the deregulation of financial markets, hold all the regional financial markets, caused huge disruptions in the world financial market and huge disruptions in the economy with long-term unforeseeable consequences [5]. It can be a parallel between the "consequences" by the situation in the market and participants, due to deregulation of financial markets in the United States and "a consequence of" the impact of deregulation of the market business enterprises in the economy of the economy such as the economy of Serbia. In the first case, the consequences of the crisis of world financial markets, in the second economic crisis with the fall of business activities that can be easily introduced Serbian economy in recession. More than certain is that reducing government regulation in business in the market can take a number of actors that are not used in proportion to the business results achieved in the market, on account of the great majority of others who bear the risk of unjustified non-market behavior as a consequence of excessive

liberalization of markets. The concentration of power in the hands of a small number of actors carries risks to the economy and the short and longer term.
If we observe the data of NBS [11] on nonliquidity companies, entrepreneurs and other legal entities that are given in Table 1 can be with great certainty determine to deregulation in the conditions of insufficient effective institutions of the system, undoubtedly takes tribute economic development of Serbia, the efficient market actors in the business market and especially small and medium-sized enterprises.
Strategic assessment, the intention and the selection of potential entrepreneurs, as formulated the strategic elements that should be realized in conditions of unsettled general and business environment, further depressing investment activity in the small and medium-sized companies and therefore the economy of Serbia. Number of nonliquidity subjects is 36,425 over a year, multiplies enormous number of problems that are nonliquidity subjects were in the business relationship, and reduces their business activities, resulting in the very survival of the market and not to talk about the strategy of development and increase market capacity for dynamic development. In many companies as a consequence of market deregulation, development strategy turned into a survival strategy and survival in anticipation of the outcome of proceedings before the state bodies that have influence and that the usual terminology under its "risk business partner of choice".

Tabla1: Nonliquidity companies, entrepreneurs and other legal entities on day 13.1.09

Nonliquidity companies, entrepreneurs and other legal entities	Number of debtors
To 60 dana	*6.047*
From 60 to 90 dana	*2.502*
From 90 to 180 dana	*4.686*
From 180 to 360 dana	*6.498*
Over a year	*36.425*
TOTAL	***56.158***

Undoubtedly, the implementation of development strategies of small companies does not depend only from the strategic assessment, the intention and choice. Competitive advantages of products and services that the company placed on the market, forecast demand trends, estimates the market capacity main competitors, the size of the company, the ability of companies action to respond to requests coming from the market, are important factors for successful development strategies, and organization of general and business environment, and the degree of market deregulation regarding the protection of property rights and respect for contracts in the economy can be crucial to work on the economic activity of small companies. Insufficiently supervised and controlled economic activity actors on the market in terms of compliance with established rules of conduct on the market, the leading economy in even greater collapse in the chain will be the debtor with the prospect that every owes a capital development through feedback processes, instead of encouraging further development, ends in the bottom consumption and unjustified enrichment of individuals and related interest groups.

6. STRATEGIC CHOICE AND IMPLEMENTATION OF STRATEGY

The paper observed activities of the strategic development of companies from start-up organization to the construction market capable and efficient business system. The changes are considered from the standpoint of results achieved implementation of business processes in the company, the opportunities and opportunities that come with the market. Appear as part of the overall strategy for the provision of development policy in terms of changes in general and the business environment, our own growth and development, requires the markets that are competent for economic development.
According to Grant [3] process of defining the strategy should result in strategic choice and support the implementation of the strategy. Crucial elements for a successful strategy are: strategic objectives, a detailed understanding of the competitive environment, an objective assessment of available and the available resources and effective implementation.
Management of small companies or the founder of the managers can "to build and develop the organization "if it is very favorable business environment, if it is about specific products and exceptional opportunity, while the business development strategy is based on the strategic management and management-based the value (the value for consumers, shareholders, excess returns). Such an opportunity is a small and business is necessary to base on the strategy of development of the enterprise based on the processes guided towards business philosophy.
Strategy for development of the enterprise should be to ensure the success of small companies in the future, measured not only indicators of the effectiveness of current business strategy, but also through the offering and the benefits that the company can expect in the future on the basis of strategic development. It is defined at the

level of enterprises and through defining the role of management in the business of adding value to business units in the phase of development and transition in the enterprise business system.

Successful development strategies of small companies exceed the goals that are most often set or the individual, individuals or groups in the company (increase revenues, profits, stock shares or a single set of goals). Aspect of social and socially responsible companies is important for the employees, local communities and society as a whole (new jobs, increasing the life standard citizens, improvement of conditions in the environment). The objectives of the company defines the strategy of mainly meet some of the stakeholders in the short term, but are not sufficient to be formulated strategic intention of the development of the enterprise because it must involve the creation of value for the company that are above the profit, which will help the company bring in market competition and recognition of the long-term.

Model of strategic management applied to the company in the development, with whom it can be to respond to requests for maximized business operations by stock holders, which can ensure success in business enterprises in the long run requires the strategist to understand the other ways and directions for understanding the strategies and on the basis of research skills and knowledge to assess the perspective of the time.

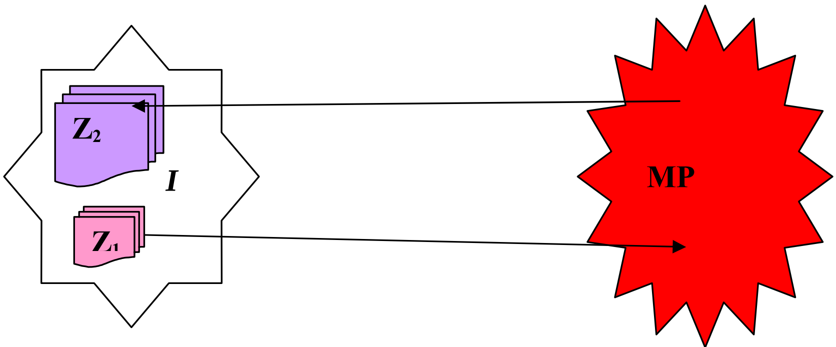

Figure 3: Previous (Z_1) and new knowledge (Z_2), researchers (I) on a small company (MP).

New knowledge about the processes in the new company often does not meet the criteria which are estimated processes. These criteria are usually aimed at the goals, versatility and adaptability organizations, business efficiency. Important information about how knowledge is a good possibility of the organization in comparison with similar processes in other organizations. To improve the process and selection of model development strategy based on the strategic intentions and analysis, it is necessary to research carried out with additional criteria to the presumptive model. Adopted solution for researchers and management will be acceptable when the model meets the criteria in the survey. 3 in the picture is a model on the basis of which company management makes strategic decisions about the process in which the company transformed into an effective business system. How the system can be defined as a set of elements (cells) with mutual connections 'to the definition and classification system in the structure of society shares in two parts, system and environment. The system defines the structure and behavior as the structure and behavior of the fundamental concepts of business as a system for the physical space and time.

For every small business and the importance of settled simulative environment is immeasurable contribution not only in the assessment of development opportunities and possibilities but with risk assessment of investment projects as one of the influence factors on strategic choice.

The strategy of creating value, as shown in the figure 4t, is formulated of the level of small companies. Adding value to business units achieved after evaluation of the management of the enterprise, corporate top, that there are prerequisites based on the results of research to the business logic of the portfolio of business activities add new business units. Management decides on the necessary level of synergy as well as the style of corporate control. This model in some way corresponds to the model of restructuring, because the water primarily about solutions that will bring greater value for any company that creates value in one or another business unit. Condition for the creation of value is well-designed implementation strategy based on the development of resources and skills of business units to respond to the demands of critical factors of success. Resources are more or less universal, so that business success depends on the process (of production and management) have a crucial role in generating profit.

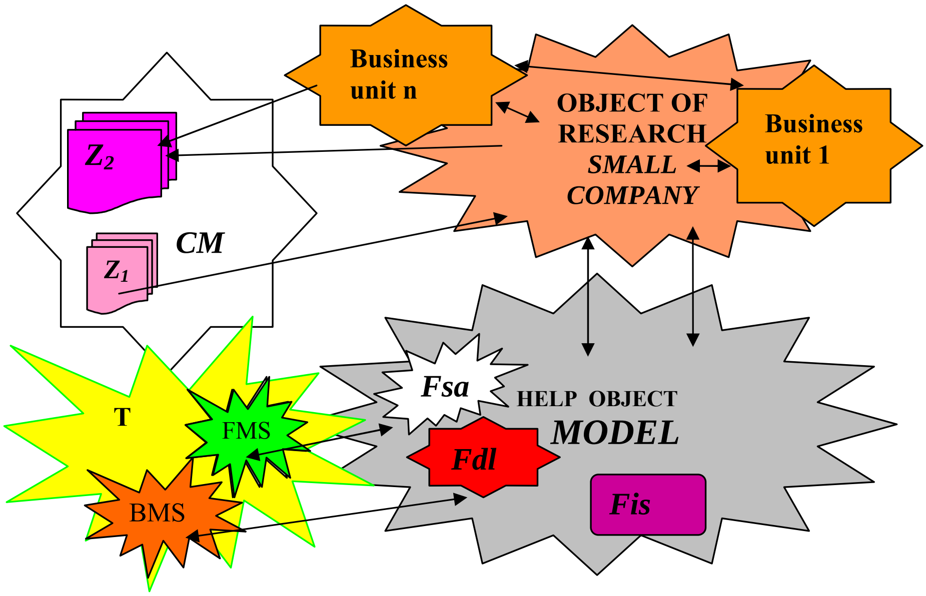

Figure 4: Market research and selection of free segment in the realization of strategic intentions
Label abbreviation: CM-Company Management, SDBS - Strategy for the development of business systems; Z1 - Previous knowledge of a small company, Z2 - New knowledge about a company and model, T - market; BMS - Busy market segment attacked products competition, FMS - free - unattacked market segment, Fsa-factors strategic assessment Fdl – factors of development limit, Fis-Factors of impact on the strategic intention

7. CONCLUSION

1. The role of strategic management in the process of accelerating the development of small enterprises in terms of unregulated domestic market and world market is to formulate a strategy that will create the future of companies while, on the basis of a comprehensive strategic assessment minimizes risks and maximizes values of companies based on the processes,
2. For the successful management of small enterprise development strategy required a change in general and the business environment, strengthen the role of markets and market operations and stopping market phenomenon of destabilization under controlled procedures for the liberalization of market operations,
3. Entrepreneur decisions based on recognized or identified cases, the assessment used for the organization and stakeholders, the vision of the future state. Approaching understanding of the administrative way of entrepreneur thinking would contribute to the increase of economy and efficiency in the process entrepreneur organization and faster development of small and medium-sized enterprises.
4. Deregulation of financial markets at the moment is not the cause of nonliquidity companies in the Serbian economy, effects of world economic crisis will further trim the implementation of development strategies of small and not just small companies in the Serbian economy.
5. Nonliquidity causes a large number of business entities, the management of credit restrictive monetary policy by the IMF requirements and guidance of business activities in sectors with lower income potential instead of the sectors where there are forces and the potential for production and development based on the advantages on the basis of geographical benefit, natural resources and production possibilities,
6. Strategy for the development of small and medium-sized enterprises must take into account the need to strengthen and finding partnership with a large and public companies,
7. Improving the competitiveness of domestic factors, the index of small and medium enterprises has contributed to increase of economic activities in this sector, create new jobs, reducing unemployment, economic and social development.

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MODERN TRENDS IN TOURISM

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Summary: *Travel as a tourist product means quality and complex product that is offered in countless variations. He can form in different ways and for him, exists demand, and on different themes. Travel can be far and near, comfortable or less comfortable, slower or faster. Wishes may be: to see something new, closer to other people, away from everyday life or simply fill the batteries i.e. take a rest. Image of tourist destination before changes requires evaluation of the image, requires a focused and long-term strategy, is part of a larger entity, and provides resistance to rapid change. Because of the importance role that it has experts in the field of tourist marketing destination must know the process of shaping, measuring, modifying and analyzing the image.*

Keywords: *tourism, image, trends*

1. INTRODUCTION

The concept of destination comes from the Latin word destination, which means the destination, or place in which to travel. Tourist destinations are very variable, which means that does not change only due to pressures of tourism, but also due to expiration of bid.
Tourist offer consists of a group of different products and services, produced by different manufacturers in the region. Therefore, the term destination means that the tourist area is defined by space and content in a way that combines the needs of demand or specific target groups. Mix offer special services to the destination are a key aspect thanks to:
- Segments of guests increased individualization,
- Increased fragmentation of tourist packages.

Travel as a tourist product means quality and complex product that is offered in countless variations. He can form in different ways and for him, government demand, and on different themes.
The study found that interest for the selection of a tourist destination depends more on image than on objective reality. As such the widely applied concept found in marketing theory and practice through cooperative image, product image, brand image, personal image, etc.
Travel can be far and near, comfortable or less comfortable, slower or faster. Wishes may be: to see something new, closer to other people, away from everyday life or simply fill the batteries i.e. take a rest.
Also accommodation can be comfortable or less comfortable, may be asked different services and the like. The stay may be longer or shorter, vacation "passive", ie, less need for scenarios, or "active", i.e, increasing the need for scenarios, and inserting elements that motivate tourist to join etc..
Processing information gathered from various sources during a specified time image, as a set of beliefs, experiences, ideas and perceptions of individuals or groups about a particular object, place or event. "Current fashion is to satisfy the experience, and no longer meet the needs".
From the definition of the concept of image, stems widely accepted definition of a tourist destination image as an expression of knowledge, impressions, prejudices and the feeling of individuals or groups about a particular object or area.

2. MODERN TRENDS IN TOURISM

Usually is considered to be in marketing in the tourism image -"all", the experts in the field of marketing are aware of the fact that the image has a crucial influence on the tourist choice destinations. Namely, the tourists make decisions about buying products and tourist destinations in the destination choice of your stay, before the

product and / or destination video and / or visited, and when it is usually water performance or image (picture) which has in him or her . Decision on the selection or maintaining attention of tourists for a tourist destination can be increased well-developed image. To effectively carry out its function, the image of tourist destinations should be:
Simple graphics and well shaped,
The content-oriented to the past, tradition and current life,
-Easy to understand,
-Forget,
-Indicative of a destination,
-True.
With the creation of image, experience has shown that the overstatement in the production or a negative sense, can be harmful influence on the future of tourist destinations, and at the same time lessen the impact of harmful leading constantly about right, constant and timely informing tourists. Image of tourist destination before changes requires evaluation of the image, requires a focused and long-term strategy, is part of a larger entity, and provides resistance to rapid change. Because of the importance and role that it has experts in the field of marketing a tourist destination must know the process of shaping, measuring, modifying and analyzing the image.
As already said, is a mental image of an individual consultation, and as such is composed of cognitive, affective and conative components. Cognitive component of the facts of characters, consisting of information that are known or that are believed to be true, is related to affective motives and determines the manner of evaluation observed object, while the conative component refers to the behavior and it is in the moment of decision about the choice.

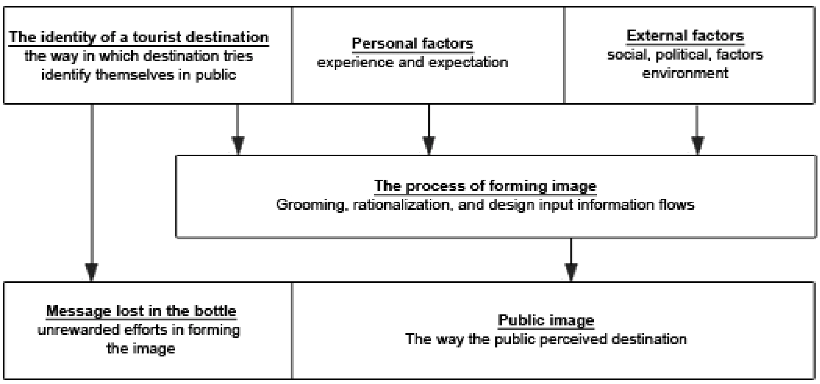

Figure 1. Model of forming the image of tourist organization

- Identity of a tourist destination and communication factor destination or public performances, performing as well as they should be perceived or remembered;
- Personal factors and expectations of potential tourists, and
- External factors, as the forces acting in the social, political, environment and environment influence the creation of opinions.

The identity of a tourist destination that is planned in the public forms on the three basic levels to: national, regional and local. The main function is to identify national-level tourist destinations, and increasing political attention of potential and former tourists, promoting image over Representative National Tourism Organization, taking into account the general image the entire state. Holders of the image at the regional level by the regional tourist organizations and the regional administration and tourist associations, whose task is to inform tourists about the facilities that are at that level can be found. Promoting the image at the local level should be the most concrete and most apparent, as is the aim of promoting the place where tourists will stay and meet their needs, and implemented by local non-profit tourist organizations, local government, tourism companies and associations, as well as the local population. Personal factors in the model image creating potential tourists may be psychological in nature, or motivation, values, peculiarities and social nature, such as age, marital status, etc. Stimulating factors include the amount, type and distribution of information that is acquired on the basis of previous experience of tourists. Analysis can be verified that the main influence on shaping the image of tourist destination before the actual visit or have previous experience of tourist motivation and socio-demographic characteristics from the set of characteristics of consumers, as well as various sources of information from the group stimulating factors. Of the perceptive-cognitive evaluation estimates a tourist destination before actualizing visit, has the most influence diversity and species information, as well as age and education of visitors. At the same time, these variables and social psychological tourist motivation

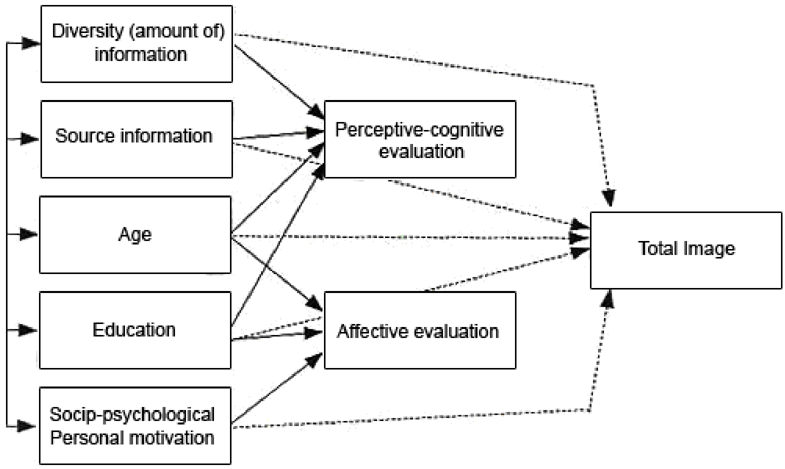

Figure 2. Model of the entry impact of the image of tourist destinations in the design before the actual visit

3. IMPACT OF TOURISM TRANSFORMATION

Exposure to the impact of tourists coming to the input transformation of the image in the form of individual perception of the destination, and grooming, rationalization and confirmation of information gathered from various sources and often against. On the basis of the results of processing confirmation of potential tourists a individual image, which can be, and not necessarily coincide with the image that the team launches marketing specialist tourist destination. Image of tourist destinations is subject to change as evolve, and that could be changed, it is necessary to know and ways of measuring the real state. At the same time, the process of forming the image of tourist destinations in the world tourists is characterized by three evolutionary phases: organic, induced and complex.

Organic image is before exposure tourists any information tourist destination through the launch of promotional activities. Induced image is formed when the wanderlust and a potential active tourists looking for information, which is knowingly expose messages tourist destination launches its promotional efforts. Complex phase is the last image in the process of evolution, including the acquisition of experience in the tourist destination.

Information that affect the evolving image of the organic complex to be reduced in the following groups:

- Information obtained in the traditional way, through advertising in newspapers, on radio, television, Internet sites and the like.,
- Information obtained from tour operator,
- Information obtained through the documentary, reports, news, movies, television programs, etc..,
- Information obtained from relatives and friends,
- Information obtained on the basis of the actual visit tourist destination.

Kotler, Haider and Rein states the following three methods of measuring image.

1. Familiarity-favorable method allows determining the degree of familiarity with the audience and destination of the target audience Kojo favors the destination. To be established familiarity with the audience, respondents offered the following choice of answers:

Never heard about	Heard about	I know very little about	I know quite about	I know very well

If the majority of respondents chose the first two or three answers, then the destination has a problem with familiarity. Of those respondents who at least in some measure known destination, the search to describe the tendency over the following response

Very unwilling	Somewhat unwilling	Indifferent	Somewhat inclined	Strongly inclined

1. Semantic differential, the content of the image of tourist destinations, and includes the following steps::
- Development of a set of relative characteristics, when the respondents asked to provide some features that would take into account when thinking about the destination. For example, the question: What do you think about when thinking about the holiday, respondents could answer time, recreational opportunities, historical attractions, the coast, and the like. Scale could be the fifth-or seventh-degree level.
Below is shown bipolar scale which can be used with this method of measuring image.

	1	2	3	4	5	6	7	
Innocent								Sinfully
Feminine								Masculine
Friendly								Cold
Romantic								Boring
Old								New
Safe								Unlikely
Interesting								Uninteresting
Exciting								Stagnant
Suitably								Ugly
Sophisticated								Simply
Natural								Artificial
Harmonic								Conflict

2. Evaluation map, visual approach involves measuring image maps showing respondents destinations, asking them to express their impressions, or feeling about some of the destinations (most loves - loves - likes / does not love - not love - not the most loved). Of the respondents are asked to say words that they first think of when asked about a particular destination, to be built on them evolutional map destinations with different shaded parts of the level of favoritism.
Echter, C and Ritche, B. made conceptual method for measuring the image of tourist destinations, ranging from the attitude that the image amalgam following characteristics:
1. attribution - holistic,
2. functional-psychological and
3. general unique.
To be established all the components of the image of tourist destinations, it is necessary to apply structured-non-structured methodology. Non-structured part includes a design of questions for the establishment of holistic components of the image through the functional and psychological dimensions, as well as the existence of important or unique elements in it.
Questions that are proposed to measure the holistic and unique components can be, for example:
1. What images or features you come to mind when thinking about the "X' 'as a tourist destination? (functional-holistic dimension);
2. How would you describe the atmosphere or mood that you expect to experience a visit to "X" tourist destination (holistic-psychological components), or
3. Specify important attractions "X" a tourist destination? (Single component).
Image analysis and results of the measurements is very important step in the management and strategic decision making. Methods of measuring destination image-favoritism ‘‘familiarity’’ can be shown on the connection between image and strategic decision-making.
Analysis of the results obtained by measuring the image of tourist destinations with Echtner-Ritchov methods may be useful in making strategic decisions of the following types:
- Positioning, when potential tourists have difficulties with categorization or differentiating certain destinations in relation to the other, the probability that is generally considered in selecting the decision-making process is decreasing. Holistic and unique image established this method of measurement provide information. How was tourist destination categorized and differentiated in the minds. Information obtained in this way are important in creating the positioning strategy whose aim was to form a clear, positive and realistic image.
- Promotion, as a very effective tool when communicating with potential tourists with a holistic openness for all the questions for determination of the tracking efficiency of promotional campaigns in the creation of the image.
- Development of tourist products, as a number of structural attributes that provides general information about attributive components destination image, especially useful for comparison of more tourist destinations and identify concurrent benefits of each of them.

3.1. Combination of supply and demand in the creation of a tourist destination image

Through strategy profiling image tourist destination seeks to better position in the minds of consumers. In this context, positioning, and is nothing more than a logical continuation of the process of segmentation, which creates a positive image for the pre-determined segment of customers. In fact the image growth is as a combination of supply and demand.

4. CONCLUSION

For destinations in the early consideration set a high level of attention, have a better look that selected for a break from those that are also in the early consideration set, but for which there is a lower level of attention. Experts in the field of marketing a tourist destination, which one first mentioned in the response to the question about the choice destination, is more likely to be successful in coaxing potential tourists to choose the preferred destination for competitive destinations, by the, whose destination is listed as other.
Probability of selection of a tourist destination will be higher in those potential tourists who have already visited the area, those who have never traveled with him. At the same time, the probability of choice of destination specific geographical area will be higher for residents closer geographical area of the residents of those remote. Visited number of one tourist destination that takes into account in the late consideration set when deciding on holiday does not exceed four. Observed importance and / or risk decisions about choosing a tourist destination has no effect on the size of late consideration paper.
Relation between late consideration paper size and paper size early consideration mostly range from 0.6 to 0.9. The size of the late consideration of group characteristics varies in accordance with the level of education of potential tourists. As the investment of effort and resources that the destination determined contact for obtaining additional information night, to the layout to the same destination in the final decision will be selected. Criteria used for evaluation of opportunities in the early consideration group will primarily be directed towards the relative importance of destination attributes, while the one used in the evaluation of opportunities in the late consideration set will be primarily directed to the restrictions for each of the possible destinations.
Destination from the late consideration paper for the potential tourists looking for more specific information has to look in the final decision will be selected from those related to the information were not collected.
Number of electoral criteria used for evaluation of destination in the early and late consideration set is usually the inverse number of destinations represented in the meetings. Reliance on passive information gathering will be the greatest in the early stages consideration paper, lower at late stages consideration paper and the lowest in the stage of making a final decision. In the categorization phase of tourist destinations, and a positive or a negative feeling of attachment to a destination you consider. Preference ranking includes destination in accordance with the relative strength of the attitude tourists, sort of alternative destination of up to at least desirable. Perceived probability of visits to destination in time is expressed in the visit order.

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ФОМИРОВАНИЕ КОМПЛЕКСА КАЧЕСТВ ГОСУДАРСТВЕННЫХ СЛУЖАЩИХ В СОВРЕМЕННЫХ УСЛОВИЯХ

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Резюме: *Исследованы критерии оценки труда государственных служащих, определены основные профессионально-этические принципы формирования модели и повышения качества государственных служащих.*
Summary: *The criteria of estimation of labour of civil servants are probed, basic professionally-ethics principles of forming of model and upgrading civil servants are certain.*

Ключевые слова: *оценки труда, модел, качества государственных служащих*

Императивом государственной власти является корпус государственной службы, который в значительной степени определяет эффективность функционирования власти. Вместе с тем, корпус государственной службы представляет собой слепок всего украинского общества и модель образа действий для отдельных индивидов групп и социальных институтов. В настоящее время в действиях этого корпуса наблюдаются кризисные явления, которые оказывают влияние на эффективность функционирования государственной власти.
В связи с этим весьма актуален вопрос о качестве государственных служащих и создании комплексной модели государственного служащего, что и явилось целью проведения данной работы.
Известно, что в основе взаимодействия любого украинского коллектива, в том числе в корпусе государственной службы, лежат три социальных регулятора: форма самоорганизации - иерархия; народный характер – эмоциональность и коллективизм; этический строй. Исходя из них, рассмотрим в комплексе модель украинской государственной службы.
Иерархическая форма управления возникла, как отмечалось, из аналогичной формы самоорганизации социума и сложилась под влиянием народного характера, с одной стороны, этического строя, с другой. В настоящее время иерархическая структура как целостное общественное построение оказалась рассогласованной. Однако отдельные отдельные организации не утратили своей традиционной украинской иерархической формы (будь то коммерческие предприятия, государственные или городские учреждения и т.п.). Следствием неадекватности социальной структуры управления является неспособность современной государственной власти согласовывать цели индивидов (число этих целей выросло после крушения «железного занавеса») с целями всего общества. Устранить негативные феномены, в том числе в сфере государственной службы, возможно, если понять причины их появления, коренящиеся в неадекватном действии основных социальных регуляторов.
Рассогласованность действия поведенческих регуляторов в сфере государственной службы, как отмечалось, определяется противоречием черт народного характера (эмоциональности и коллективизма) и требований профессии (как целерациональной деятельности), что получило негативное выражение в деятельности государственного служащего. Целерациональность часто оборачивается отсутствием инициативы; а импульсивность проявляется в отсутствии рационального целеполагания и низкой технологической дисциплине.

На современного государственного служащего оказывают противоречивое влияние элементы «этики убеждения» и «этики ответственности». Регламентируемая Законом Украины «Про Державну службу» этика поведения государственного служащего предусматривает:: добросовестное выполнение своих служебных обязанностей; почтительное отношение к гражданам, руководителям и сослуживцам; стремление к достижению высокой культуры общения; недопущение действий и поступков, способных навредить интересам государства, государственной службы или отрицательно повлиять на репутацию госслужащего.
Взаимодействие индивидов построено на этике убеждения, а побудительные стимулы к действию определяются этикой ответственности. В результате, индивид может быть стимулирован стремлением к денежному вознаграждению, моральному поощрению, к повышению в должности, но его инициатива будет тут же остановлена нормой коллективного взаимодействия – «не выделяйся». В социуме, в котором взаимодействие индивидов построено на этике убеждения (а таковым является корпус государственной службы), индивидуальная стимуляция способна породить аномию или разрушить такой социум. Как видно, причина этих явлений в синкретизации этики убеждения и ответственности, что следует из выводов второй главы и может быть представлено в виде таблицы (см. таблицу 1).
Снять противоречие этики убеждения и этики ответственности возможно через утверждение этики убеждения, ее принципа «следуй модели заданной лидером», как фундаментального принципа «служебной преданности». Подчеркнем, что специфика «украинской служебной преданности» строится на преданности служебному статусу лидера, соответствующему принципу «будь как все».

Таблица 1: - Государственная служба: условия мотивации и взаимодействия индивидов

Мотивация государственных служащих		
Инструменты мотивации	Этика ответственности	Этика убеждения
Побудители (стимулы) (к чему стремиться)	Индивидуальные материальные и моральные стимулы, стимулы личного карьерного роста	
Мотивы (зачем стремиться)	Перспективы профессионального роста, заработок, положение в обществе	
Организаторы действия (как делать)	<выполнение должностных обязанностей>.	«приказ начальника»; «личная ответственность за порученное дело»
Взаимодействие между индивидами в системе государственной службы		
Этические константы	Этика ответственности	Этика убеждения
Основной функциональный принцип		«следуй норме, определенной лидером»
Основная норма поведения		«не выделяйся и соответствуй своему статусу»
Нормативный запрет		«взаимодействие индивидов на государственной службе не может складываться по формуле: все, что не запрещено, разрешено»
Оптимальный организационный механизм		*механизм пожизненного найма*

Служебная преданность профессиональному статусу, предполагает не только эмоциональное отношение, но и компетентность, на что указывают исследования кафедры менеджмента Донбасской государственной машиностроительной академии (см. таблицы 2 и 3). Следовательно, отбор персонала в сфере государственной службы должен быть построен не столько на отборе «угодных», сколько на отборе *преданных* и *компетентных* специалистов.

Таблица 2:- Оценка важности качеств госслужащих (анализ данных)

Данные в %				Анализ: сведение к общему критерию в условных соотносимых цифрах (А+Б+В)		
Оцените степень важности различных качеств работника, влияющих на его продвижение по службе в вашей организации	А. Дост.важ.	Б. Не оч. важ.	В. Совс. не важ.	$Г_1$. При Б=-0,5 (А=1, В=-1)	$Г_2$. При Б=-1 (А=1, В=-1)	Вывод
Добросовестность в работе	78,3	21,7	0,0	67,5	56,6	Достаточно важно
Профессиональный опыт, стаж	76,1	19,6	4,3	62,0	52,2	Достаточно важно
Порядочность	50,0	43,5	6,5	21,8	0,0	Скорее важные
Покровительство начальника	47,8	32,6	19,6	11,9	-4,4	Скорее важные
Умение нравиться руководству	43,5	37,0	19,6	5,4	-13,1	Скорее важные
Твердость принципов	32,6	52,2	15,2	-8,7	-34,8	Скорее не важные
Конформизм	30,4	34,8	34,8	-21,8	-39,2	Скорее не важные
Возраст	30,4	50,0	19,6	-14,2	-39,2	Скорее не важные
Пол	17,4	45,7	37,0	-42,5	-65,3	Совсем не важно
Политическая ориентация	8,7	37,0	54,3	-64,1	-82,6	Совсем не важно
Национальность	6,5	30,4	63,0	-71,7	-86,9	Совсем не важно

Таблица 3:- Критерий оценки труда государственных служащих

По каким критериям оценивается труд служащего	респонденты	эксперты
Добросовестное отношение к работе	70,7%	72,0%
Высокие нравственные качества	56,5%	61,0%
Соблюдение дисциплины, порядка	45,2%	40,2%
Творческая инициатива	30,8%	43,9%
Реальная польза для организации	24,7%	29,3%
Строгое соблюдение правил	22,9%	23,2%
Стаж	22,3%	22,0%

Изучение требований соответствующих инстанций и их руководителей к претендентам на должности специалистов, главных специалистов, руководителей отделов и департаментов государственных учреждений муниципального и областного уровней, показывает, как видно из таблицы 4, что к ним предъявляются высокие требования касательно наличия опыта работы в госслужбе. За такие требования высказались 87,5% респондентов, среди которых были как специалисты, так и госслужащие – руководители высокого ранга.

Проведенные исследования дали возможность сформулировать следующие основные профессионально-этические принципы формирования модели качества государственных служащих.

1. 1 Компетентность и профессионализм
2. 2 Высокоразвитое чувство долга и ответственности
3. 3 Обязательная забота о гражданах, соблюдение правила «не навреди»
4. 4 Принципиальность и беспристрастность
5. 5 Умение хранить служебную тайну

Таблица 4:– Требования по наличию опыта госслужбы для претендентов, поступающих на государственную службу

Требуемый опыт работы, годы	Городской уровень			Областной уровень		
	Специалист	Главный специалист	Руководитель отдела	Специалист	Главный специалист	Руководитель отдела
до 1 года	X					
1-3 года		X		X		
3-5 лет			не менее 3-х лет		X	
Свыше 5 лет						X

Однако столь сложная задача подбора преданных и компетентных специалистов в обычной практике зачастую реализуется только с опорой на личный опыт либо руководителя подразделения, либо его кадровой службы. Данный опыт различен у разных людей, отсюда - серьезные различия в принципах отбора и служебного перемещения кадров государственной службы, что является предпосылкой аномии, для устранения которой необходима выработка единой научно обоснованной и законодательно утвержденной *методики оценки персонала*. Данный шаг может быть первым к созданию *механизма пожизненного найма*, способного обеспечить устойчивое функционирование государственной службы. А тем самым, может быть снята аномия, порожденная синкретизмом этик убеждения и ответственности.

На сегодняшний день этический строй, некогда оформленный религией и трансформировавшийся в коммунизм, разрушен. Нет общесоциального идеала, как нет и идеала госслужбы (в лучшем случае они только декларируются). И хотя эти идеалы научно определены, требуется их пропаганда (социальная реклама) и институциональная поддержка, в качестве такой поддержки в монархическую эпоху выступала церковь, в советскую - партия. В настоящее время необходим аналогичный *социальный институт*, в числе задач которого должны быть и разработка методики оценки персонала государственной службы и объективных, научно обоснованных принципов социальной кадровой политики.

Инструментальные цели и нормы, действующие в сфере государственной службы, на сегодняшний день сложились и аналогичны общесоциальным, но столь же неструктурированны. Специфика государственной службы и необходимость преодоления аномии требует построения четкого и ясного механизма интеграции целей и норм. Таким механизмом, на наш взгляд может быть *стройная система льгот*.

Профессиональная деятельность государственных служащих, связанная с подготовкой и реализацией конкретных управленческих решений, требует от них конкретных умений, знаний и навыков. Этому должно способствовать функционирование государственной службы как самообучающей системы.

Одним из ключевых положений, которые должны быть учтены при разработке концепции формирования содержания программ подготовки и повышение квалификации государственных служащих является состояние экономики Украины. Прогнозы свидетельствуют об ограниченности финансовых ресурсов, которые могут быть выделены государством в ближайшее время для осуществления обучения государственных служащих.

В связи с этим, основными требованиями к разработке структур и содержания программ обучения государственных служащих должны быть следующие:

1. Формирование таких знаний, умений и навыков, которые обеспечили бы возможность горизонтальной (без дополнительного обучения) и вертикальной в определенной сфере деятельности ротации государственных служащих.
2. Программы должны формироваться по модульному принципу и обеспечивать необходимую и достаточную профессионально-ориентированную подготовку.
3. Содержание модулей должно способствовать овладению умениями и навыками выполнения профессиональных задач и функций.

В комплексе модель украинской государственной службы должна быть построена на принципе личной преданности, предполагающем следующие инструменты социальной реализации:

- разработка и институциональное утверждение этического кодекса государственного служащего;
- разработка и пропаганда (социальная реклама) идеала государства и государственного служащего;
- утверждение социального института поддержки идеалов и норм;
- введение механизма пожизненного найма в сфере государственной службы;
- прозрачный механизм карьерного роста государственного служащего;
- формирование ясной, четкой и открытой системы льгот.

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GOALS OF INFORMATION TRANSFER

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Summary: *Communication is the process of conveying messages between the people and was achieved only when the message arrived to the recipient. In every communication, there are formal and informal communication channels. Formal channels have been officially adopted and recognized as circulars, meetings, posters and the like. An important element in the whole process is the feedback, which rounded the process, so that by the recipient, there are indications that it is received and understood the message*

Keywords: *communication, information, process*

1. COMMUNICATIONS PROCESS - DEFINITION

Communication is the process of conveying messages between the people and was achieved only when the message arrived to the recipient. In the event that the message is not received by the recipient to believe that the communication does not exist. To be effective communication to the recipient, it is necessary to understand the meaning of the message and to show the sender, through certain that this reaction is expected.
Communication as a process by which people try to understand each other include elements of a different nature:

- **cognitive** - reflected in the abilities of perception, interpretation of messages, causing emotions and reactions
- **semantic** - reflected in the use of spoken and written language, terms and jargon
- **symbolic** - the use of gestures, facial expressions, body movements, style, clothing and the like.

Izbor metoda zavisi od poruke koja treba da se prenese. Opšte gledano, poruke mogu da sadrže činjeničnu informaciju, mišljenje ili emociju.
In organizations is a great diversity of messages that need to be transferred. Some messages are specific individual, such as feedback to the supervisor about the performed task or the expressed concern over the continuous delays, or messages in which individuals speak about the future plans in relation to the career. Other messages are team or group oriented, as the current group objectives, changes in the structure of the team or joint weekly action plans. The third group message applies to all employees; to the example of periodical business results, the new image of the new system. From previously mentioned examples it is clear that organizational communication is not only vertically downwards, but also vertically upward, as well as sideways.
The key to success of many organizational communication systems is the extent to which can provide two-way or three-way communication. In every communication, there are formal and informal communication channels. Formal channels have been officially adopted and recognized as circulars, meetings, posters and the like. Informal communication channels, which are part of social relations at work, affect the interpretation and understanding of formal communication.

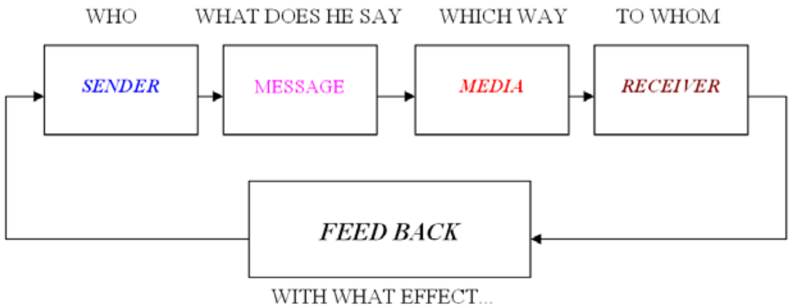

Figure 1*:* Schematic preview of communications process

2. GOALS OF COMMUNICATION

Some of the goals of communication are created to be convincing. For example campaign security. More attention is devoted to storage companies and seeking the opinion of employees as a form of inclusion and participation.
Communication vertically upward is important for the following reasons:
1. Helps managers to understand the issues of employees
2. Helps managers to have more contact with the attitudes and values of employees
3. Can warn managers to potential problems
4. Can give the managers possible solutions to problems
5. Can give managers the information they need when making decisions
6. Helps employees feel to participate and contribute to, and can encourage motivation and commitment to the future of directions
7. Can give some feedback on the effectiveness of communication that goes vertically down and the idea of the way of its improvement.

ACAS (2000) believe that good communication can improve organizational efficiency, improve performance management and decision-making, improve performance and commitment to employees, contribute to developing greater confidence and increase business satisfaction. Organizational communication is directed to the outside world the same as employees. Newspaper companies, for example, tend to inform employees about what is happening in the company, but the design and certain image of the outer world.

3. IMPORTANCE OF TELECOMMUNICATION CONNECTIONS

Appropriate and successful approach to communication and the understanding is analogous to telecommunications. The sender has an idea of what to communicate and which then turns, for example, in the words, pictures or e-mail text. In these different phases of the transfer of thought to mind one other point in which there are errors and possible and likely. It is almost impossible to know whether the ideas in the mind of a person correctly transferred to the thought of another person. An important element in the whole process is the feedback, which rounded the process, so that by the recipient, there are indications that it is received and understood the message.

4. INTERFERENCE - AS AN ELEMENT OF COMMUNICATIONS PROCESS

The next element in the process of communication as "interference" (everything that can hinder the process of transmission: inaudibility, inattention, physical noise). The quality of transmission and feedback will affect the level of presence of the element of "interference". Our way of interpretation of world will condition the range of expectations when you communicate, so, for example, instead of what we hear people say, we hear what we say our awareness that they say - and the difference, understand the possible.

- Frame of reference - a little one of us changes thinking alone. To us easily influence opinion developed within the group that is identified, that is reference group. When you talk about something, discussants, things considered from their own frame of reference.
- Stereotypes - the extreme form of expectation letting to determine the content of communication, which is expected certain types of statements or the attitude of the stereotypes of a person. For example, the Irish are

talkable, Scottish are not, and British are cold. There are stereotypes about men and women and their relationship to work, and stereotypes in relation to the years and dr.

- Cognitive dissonance - is the extent to which people have successfully received the information they consider incompatible personally constructed with a view of the world.
- What someone receives information that is compatible with his apprehension, it is very likely that will understand, believe in it, remember and act in accordance with it and vice versa.
- Halo effect - a slightly different aspect of expectations that determine the content of communication, which causes extreme reaction recipient information: information or accept or reject. When you hear someone in whom we trust and who believes, we are predisposed to compliance with what the person says, because her endlessly believe. On the other hand, as we learned that we not trust someone then we will what the person says or ignore or receive with caution.
- Semantics and jargon - when it comes to the transfer of ideas from one person to another. Difficulty occurs when ideas are not transferred just because it is not carried over the meaning of all the participants of communication can use the same words or symbols, but, unfortunately, the same symbols of different people can suggest different meanings. When is the middle of jargon, the problem occurs because certain words or phrases can have a specific meaning, and that are not understandable those who are not familiar with
- Inattention and forgetting - the last a combination of problems that are mentioned here is the extent to which people do not bring attention to what the notice or what you see. It is a known human predisposition for selective attention. The most common example is when the listener focuses attention on the suggestion of a person in the general murmur of people.
- The level of forgetting what we have heard is very great. Probably for a few hours forget half of what we have heard, and after two or three days do not remember more than 10% of what we have heard.

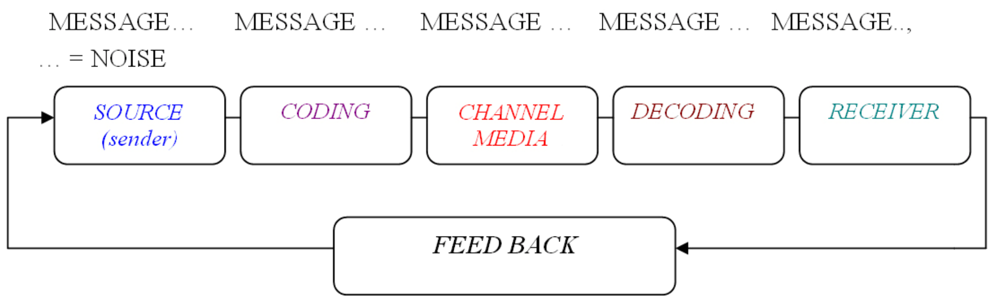

Figure 2. Shematic preview of communication model

5. CHOICE OF COMMUNICATION METHODS

As we already said at the beginning, there are many communication media:
Voice (meetings, Briefing group presentation), written (Memoranda, newsletters, reports, e-mail), audio-visual (video conference, slides, power-point presentations, posters). The choice of methods of communication will depend not only on the directions, but the speed of communication, as well as the specific nature of the message to be transferred. Many of the best messages are transmitted using multiple mediums of communication. The most important thing is that all the previous messages and to avoid contradictory messages. Variety is also an important factor in the selection of communicative method.

6. CONCLUSION

With the development of Internet, e-mail systems work very well throughout the world, and many among us have become dependent on just this kind of communication that allows the sending of the report the same day when you need to be received and immediately get feedback from colleagues who usually can not respond to us a phone call when we need. But despite the progress that was made, e-mail affect our behavior and in other ways. For example, going on to colleagues in the office, sat a few meters away, and sent each other e-mail, rather than to communicate face to face. Sproull and Kiesler believe that e-mail has social characteristics that are different from other technologies and that can result democratization.

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REDEFINING THE GOALS OF SCHOOL DEVELOPMENT ON THE EXAMPLE OF BOSNIA AND HERZEGOVINA

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Summary*: Powerful changes in the external environment of schools, in all aspects of social life and work, significantly affect the functioning of the education system as a whole and each school individually. The dynamics of these changes have overcome formal organizational structures and leaders, and imposed ... "the creation of decentralized and flexible structures that allow for close cooperation between local schools and businesses," ... but also schools with the local community and other targeted public. "We have entered the period of education in which learning will be the largest wealth, related to all life processes" (Fantini in Beare, H. 1989:166). An analysis of the school environment, as an ongoing management activity but also of all the employees ... "enables organizations to respond in a timely and quick manner to changes in the environment, their adaptation to new requirements and the selection of a strategy" (Trnavčevič, 2000:53). According to Koren (1999): "Schools that are able to adapt quickly to their environment and to learn faster than their competitors, will be successful ...). Education in general, and each school separately, meet the challenges of preparing young people for life in the future. The aim of this paper is to draw attention to the needs of the redefinition of the goals of the school as a factor of abandonment of informal organizational structures.*

Key words*: redefining, objectives, informal organization*

1. INTRODUCTION

Given the globalization of educational activities, and expressed intentions of BaH to integrate into the EU, an encouraging fact is that the EU stimulates ... "that various states in different ways and with the help of mechanisms of establishing and ensuring quality seek their own path to a better system of education. " (Black eye, 2001:5).
For the purposes of this work, the subject of research will be placed in the frame of intensive changes in our environment. In accordance with the above, I set the following research objectives:
- present organization theory in education, and the results of scientific research in field of organizational culture, and project organizational structure of educational institutions,
- find out, in time and continuity of development, to what extent the organizational structure of schools corresponds to challenges and changes in the external and internal environment of the school,
- Suggest an adequate concept of modeling the organizational structure of schools which would be an adequate change with respect to challenges from external and internal environment.

It is my purpose to work through the organizational structure of research schools at different stages of development and show regularity in the evolution of different organizational cultures and organizational models in line with the challenges of internal and external environment of schools.
Based on set of research goals, we can define the following:
- H1: The organizational structure of schools has a variable shape and development, and is modeled in accordance with the culture of schools, and changes in the external and internal environment.
- H2: The formal organizational structure of schools corresponds to relatively stable conditions, the construction of organizational culture, as well as weak challenges from external and internal environment.
- H3: The informal organizational structure of the school was built in conditions of an unstable environment when radical demands and needs of different participants in education are expressed (stakeholders) for introducing the culture change.

Methods provide information on opinions, attitudes and relationships of people towards certain phenomena, processes and relationships in which people participate.
The main aim is to test the presented hypothesis of the research.

The sample is representative, 60 parents of students from grades 1-4, 30 teachers of all profiles and 60 school students from grades 1-4.
As a method of data collection I will use the questionnaire "360 degrees" (round estimate) in the form of three custom forms depending on the target group of respondents.
Changes in the external environment of schools (beginning of 2002) significantly influenced the redefinition of the development goals of schools, especially in the non-formal organizational structure and the theory of organizations, mostly prevailing understanding is that ... there is no organizational structure, which would be suitable for all types of organizations , for all times and all conditions of the external environment (Kavčič, 1991, 184).
The objectives of the organization and other factors are also dynamic and changing in space and time, and because of that, the organizational structure of schools must constantly adapt to these changes.
Introducing changes in schools was the prerequisite for establishing permanent organizational climate and culture change.
It can be expected that, formally and legally, the relationships in schools will be changed over time which will enable Bosnia and Herzegovina to join democratic Europe and the world.

2. DESCRIPTION OF THE STATE OF SCHOOLS IN THE CONTEXT OF PROFESSIONAL TRAINING IN TUZLA CANTON, BOSNIA AND HERZEGOVINA

From the viewpoint of research subjects, in a certain frame without the deeper part of the theoretical elaborations, JU MSS "Hasan Kikić" in Gradacac (School) can be defined as contemporary secondary institution for high-quality vocational and technical education of youth.
The school is attended by approximately 1300 students classified in 46 classes, in over 30 professional vocations and professions (GPRS, 2007 / 8). Depending on the success in the course of education, horizontal and vertical mobility in the education system is guaranteed. In the school there are about 100 teachers and professional associates, and the support-technical staff consists of a total of approximately 120 employees. The structure of educational profiles is mainly inherited from the end of the eighties in the twentieth century, when the system of education was highly centralized and mostly followed major economic systems in the local community or the wider regional environment.
There was a question - where to go next? Do you keep a legacy of enrollment policy without relying on the labor market and make hyper production of educational profiles for the unemployment office, or do you redefine the objectives of school development, organizational structure and policy input to adapt to the actual needs of market-oriented users.

2.1. The relationship between the environment and schools

Organizational environment outside the school is determined by specific operational and internal environment (Villa, 1994, 248-251). Given that the specific impact of environment on redefining the basic objectives of schools and informal adaptation to the organizational structure of the new requirements, the subject of this research will be limited to a shorter elaboration of the following:
a) to briefly define the impact of specific political, legal, technological, demographic and socio-cultural environment;
b) the impact of specific operating environments;
c) most important segments of the internal (inner) environment.

2.2. Macro (outside) the school environment

In Bosnia and Herzegovina, as a complex state which consists of two multiethnic entities and three constitutive peoples, there is no unified educational system (the Constitution of Bosnia and Herzegovina, 1995). Under the patronage of the OSCE, a campaign for reform and the establishment of a unified educational system in BaH was launched, and the first effects of these reforms are felt with the beginning of the school year 2003/2004.
The largest impact on the place and role of the school and its function in society have the Assembly of Tuzla Canton (founder) and the Government of TK, the Ministry of Education, Science, Culture and Sport of TK and the Pedagogical Institute Tuzla, as a professional administrative organization of the Ministry.
Other social institutions and state authorities do not have significant impact on the work and organization of schools because they do not possess efficient mechanisms of pressure on the founders of the school.

2.3. Micro (local) school environment

We will take for granted all those entities (with legal authority), and factors in the local community - the local council Gradacac who have expressed interest in as well as responsibility for the effective functioning of schools, although some of them do not possess efficient mechanisms of impact on the adoption of important decisions for the functioning of schools. On this occasion we will mention the following:
Students and their parents through the Parent School Council (with representatives of the school board), associations of parents, the community school students etc. exercise strong pressure on the manager of the school to provide students with a quality vocational and technical education.
The local community received significant powers from the aspect of school according to the Law on Amendments to the Law on Secondary School TK (Law on Secondary Education, 2002).
The Municipality is, relatively its economic power, responsible for the construction of educational facilities, infrastructure, and support to the overall educational work of schools.
Economic subjects (enterprises) require from schools a high quality, professional, efficient and flexible educational profiles required by the labor market.
Employment office CT (Office Gradacac) also requires from schools the introduction of new educational profiles required by the labor market in the region of Gradacac.
Various governmental and non-governmental (domestic and foreign) organizations with headquarters in Gradacac have specific requirements from the school, mainly because they work on mediation in employment and professional rehabilitation of certain categories of population.

3. THEORETICAL CONSIDERATION OF THE STRUCTURE OF SCHOOL AS A NON-PROFIT ORGANIZATION

From the aspect of organization theory, in literature you will find a lot of different definitions of a school as an organization. That a school is ... a kind of tools and instruments, mechanical devices, settled and developed, to allow some kind of target activity (Morgan in the Koren, 1999, 17), and that it is ... the body which responds to changes or causes, both in the inner, and external environment (Tavčar, 2002, 4). According to Lipičnik (1998), a school as an organization has the following elements: a) structure, b) culture, c) technology and d) people. Given that the subject of our interest is informal organizational structure of schools, due to the precise understanding of the problem it is necessary to obtain accurate theoretical insight into the conceptual-categorical devices used for the purposes of this work.

3.1. Quality of schools as a concept suitable for the present and the future of education

We have already pointed out that the globalization of education activities must reflect the new role and position of all subjects of the educational process. In pedagogical, but also in the literature on management in education, we come to different typologies of schools. Generally, schools are grouped into three basic types: a) the conventional schools, b) congenial schools and c) collegial schools.
Conventional school is actually a traditional school. It is mostly viewed as a workplace where teachers will start and finish a career of an educational worker. Teachers in such schools operate autonomously.
Congenial school is the type of school that has achieved a high level of socialization of employees.
Collegial school represents the type of school in which the freedom to exchange of opinions and open conversation among employees "creates satisfaction" as a consequence of the interaction of teachers.
To teach people mutual cooperation, tolerance and acceptance of different attitudes and opinions, and tolerance and patience to carry out a professional job, is a difficult and lengthy task, i.e. a long-term process.

4. FORMAL AND INFORMAL ORGANIZATIONAL STRUCTURES

In the available literature used for the purposes of this work, most of the authors define the structure as a system of relations among people, to do a particular job. Thereby, they often point out that ... there is no organizational structure, which would be suitable for all types of organizations, at any time and in all the surrounding circumstances (Kavčič, 1991.184). The organizational structure is primarily affected by the development goals of organizations, and numerous inner and outer factors. The objectives have impact in that they impose a specific organizational structure that will perform the tasks foreseen for achieving them. It is important to note that the ... goals of the organization and other factors change in space and time, so we have an organizational structure constantly adaptable to these changes (Lipičnik, 1988.59).

Formal organization is mainly designed, planned and programmed in accordance with formal documents such as laws, statutes, rules and similar legal technical mechanisms. Their goals are usually explicitly committed, but also this structure corresponds to stable conditions of the surrounding.
Informal, is in fact a weakness of formal organization to quickly and effectively respond to changes in its environment. Informal organization has a leader who came in this position on the basis of personal characteristics, mainly because he innovates and imposes attractive targets for associates who represent a new engine of growth for the liberation of creative energy in the organization.
Club culture model (Handy, 1986 in Koren 1999:77) can best be compared to spider web. Here, the principal is, as the spider in the web, in the center of the school and, if possible, creates and is responsible for everything that happens, thinking that he is the only one who do it.
The advantage of this organization is the ability of quick response to new problems, and informal communication contributes to it, i.e., a well connected network.
The problem occurs when the "spider" goes away for a shorter or longer time and the network remains by itself. Often, it is destroyed very quickly.

4.1. Mintzberg's professional bureaucracy organization

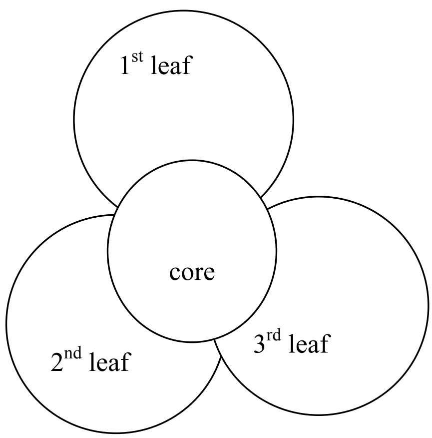
Since schools are in many ways different from other organizations, according to Mintzberg they are called "professional bureaucracy", which is based on professional and vocational knowledge.
The fundamental pillars of a professional bureaucracy are in fact highly professional specialized experts - masters of their trade, who, to a large extent, autonomously perform prescribed duties.

4.2. Culture role model

This model of organizing a school is very common and we can compare it with the Greek temple. Temple pillars are mutually independent, have the same importance and all correspond to a single "roof", on which there is a manager and connects all of them. Roles are precisely defined and each of the pillars knows what to do, but in doing its job it has great autonomy. Small changes in roles and division of tasks do not disturb the system. However, major changes and a large shifts are not possible.

4.3. Clover

This organizational structure will serve us as an illustration of "informal organization" in the making, which quickly responds to the challenges from an unstable environment.
This type of organizational structure is classified by authors as the humanistic model of organization which first of all includes the ... respect for individuals and human values, width, counseling, agreement, decentralization, appropriate project organization, flexible procedures, multi-channel communications, target management and co-decision (Everard and Morris, 1996, 180). Two basic characteristics of this organizational structure are decentralization in decision-making and teamwork. Handy (in Koren, 1999) predicts schools in the form of clover with the core and three leaves.



Clover (Handy, 1989 in Koren 1999:86)

The core schools are teachers who will be fewer than now.
The first leaf consists of the teachers of professional and general subjects which are not fundamental and that we need at a certain time, depending on the needs of the environment
The second leaf consists of part-time teachers.
This is explained by the fact that professional knowledge of teachers in certain areas gets old very fast and is no longer applicable in practice, and thus becomes pointless.
The third leaf presents talented students, whose knowledge exceeds the knowledge in a certain mental model.

5. ORGANIZATION WHICH LEARNS

When we talk about what we need from schools today, it is not enough for the school as an organization to only react to changes of any kind. Schools must anticipate change, and hence change themselves. The ultimate goal is to learn to behave in accordance with the new challenges of the environment, and proactively, not reactively, find optimal solutions for the existence in the future.
Accordingly, "an organization which learns" is a place where people continually discover how to create, modify, and finally change their reality.
The ability to learn faster than the competition is usually defined as the only sustainable competitive advantage of organizations in the future.
In order for an organization to become "an organization which learns", it must gradually change the following elements (Sengi, 2003: 11-16):
- Systemic thinking
- Personal Skills
- Mental models.
- Creating shared vision
- Team Learning

However, in reality, organizations are very weak learners, because of the following elements:
- Planned organization
- Keeping the organization
- Defining the responsibilities and tasks of employees

In my opinion, if an organization wants to convert itself to an "organization which learns", a good school leadership is the key factor.

6. RESEARCH RESULTS

It is very important to use the human creative potential in the organization to introduce changes in accordance with the challenges from external and internal environment.
Based on the requirements and needs of users of services, the strategic goals of the school's were redefined, whose realization is not possible within the prescribed formal organizational structure.
Construction of optimal model of organizational structure that the school will meet the new demands and challenges of the environment must necessarily go through the experimental phase of modeling "informal organizational structure."
To show developmental flexibility and organizational structure of schools to the changes in the environment, as a kind of legitimacy in the development of schools, is in fact the basic goal of the empirical research.
In this paper, through the results of empirical research of the adjustment of organizational structure to changes in a school's environment, we will perform in an indirect method a classification of schools on the "cultural continuum".
The results of research, through the confrontation of theory and current practice of organizing a school, will reveal to us the most important (prevalent) attributes correspondent to the typology of a conventional, congenial or a collegial school.
The methods of research provide information on opinions, attitudes and relationships of people towards certain phenomena, processes and relationships in which people participate.

6.1. Organization of schools in the period between 1995 and 1998

External environment of the school in the referent period was extremely difficult. In an improvised school facility, the principal of the school set up by the Government of TK gathered about twenty professional and non-professional teachers and other school employees, and organized an educational-training process.

From the theoretical aspect, the model of school organization in this period was in many ways similar to Handy's (1986) Club culture ("spider web"), which will be illustrate bythe following arguments:
- the principal of the school (without open competition) was set by the Government of TK, and he was given clear objectives and tasks regarding the organization and functioning of the school (the main spider); the principal of the school selected without competition his aides and teachers, in accordance with the political environment and his own estimates and requirements (he set the first and second line of spider web);
- the flow of information from the external environment towards the school and vice versa went through the director (principal spider had absolute control);
- although there was an informal communication between teachers and school directors inside the school, any form of dissent or critical opinions on the specific moves of the director brought nasty consequences for his opponents (the spider chased intruders out of its web);
- the principal rarely transferred part of his jurisdictions and authorities to his aides. And if it would do it, it was only for formal reasons, to hear "a good opinion on himself and his own methods of work".

6.2. Basic characteristics of school development as a formal organization in the period from 1998 to the beginning of 2002

The shortest possible view of the process of designing school organization in the mentioned period aims to demonstrate a clear visualization of concept distinction between formal and informal organizational structures.
In the mentioned period, until the beginning of 2002, as factors of a stable macro and micro environment of the school (no deeper elaborations because of the available space, and purpose of work) we will specify the following:
- Moving the school in a brand new facility,
- Optimum conditions for the performance of educational work,
- Effective implementation of the Law on Secondary School of TK,
- Choice of expert teachers and highly skilled personnel by means of competition,
- Choosing the principal of the school by competition, a quality application of the existing curriculum,
- Admission of students into school by taking entry exams,
- Practical teaching takes place mainly in school,
- Normalize the salaries of employees,
- The economic environment is constantly bad in the expectation of privatization, and there are no requirements from the school,
- Labor market does not need skilled labor,
- Local community has neither clear development strategy, nor any requirements from the school,
- The entire educational work in schools is carried out routinely,
- Impact of international governmental and non-governmental organizations took place through the allocation of humanitarian support, etc.

6.3. The objectives school development

The basic objectives of the school in this period include the following:
- good organization of educational work in regular teaching;
- realization of quality practical training in workshops;
- realization of cooperation with parents;
- education of part-time students;
- permanent professional training of teachers;
- evaluation of teachers' work, their assessment, and promotion in senior professional positions;
- evaluation of students' achievements in all forms extracurricular work;
- organization of competitions, festivals and other forms of creative work of students;
- cooperation with the local community, the realization of the transparency of school work, etc.

Basic characteristics of school development as an informal organization from the beginning of 2002 until 2007

Given that the unstable conditions of the outer and inner environment school expressed themselves "orchestrated" from the beginning of 2002, from that time until today, the informal organizational structure continually grew and assumed primacy over the formal.

Important characteristics of unstable school environment

In the period from the beginning of 2002 until today in the external (macro) and local (micro) environment of the school, significant changes have happened that have qualitatively redefined the goals of the school.

We will mention only the most significant:
- Adopting unique strategies for education reform in BaH (2002);
- Expansion of the PHARE-VET program of the EU to BaH, in the reform of vocational and technical education;
- Amendments to the Law on Secondary School TK (2002) provide a deeper democratization of relations in the school (the formation of the community of students, parents, School Council and their direct participation in the work of the Managing Board), a greater degree of autonomy in designing the school curriculum, adjustment of the enrollment policy to needs of students, direct participation of local communities in the MB of the school, etc.;
- Adoption of the Law on students' cooperatives (2002), which allows a market evaluation of practical training and ferial practice for students;
- Growing businesses in the local environment (foreign investments) with modern production technologies, which impose relations of partnerships with the school in the education of their required professional profiles;
- Influence of foreign NGOs to start manufacturing projects in the school.
- Implementation of partnerships with schools abroad and assistance in equipping the school with IT facilities

The impact of unstable surrounding of the school on redefining the basic and setting new goals of the school

We have already pointed out, as a kind of rule, the basic theoretical position that the ... goals of the organization and other factors change in space and time and that organization is successful only when it is able to quickly adjust to the direction and intensity of these changes. The same holds true for the director as a successful leader and his main characteristic, among others, is ... the ability adjust his behavior to changes and their stimulation.

6.4. The results of survey research

In order to come to conclusions how conditions of unstable school environment influenced the "redefinition" of the goals of development, we carried out a survey testing the directly interested groups in educational activities of the school: students, teachers and professional associates, as well as parents whose children already attend high school. The survey was carried out through questionnaires in two separate phases, as follows:
The first phase - Preliminary survey using open type questions in the function of testing of indicators of validity in the selection and formulation of important goals of the school.
The second phase - Basic survey research with the closed type questions (scalar), where we measured the quality of attitudes and degree of satisfaction of the previously tested priority development objectives of the school.
The questionnaire (3 adapted forms) is intended for groups of respondents by the method of a representative sample (60 parents of 1-4 graders, 30 teachers, of which 10 professional and theoretical subjects, practical subjects 10 and 10 general subjects, professional associates, and 6 1-4 grade students).

The results of survey of the basic goals of school development

The survey research of the main objectives of the school (45th act of the Law on High school) has shown - confirmed the following results.
With the quality of education in the school primarily dissatisfied are the students and their parents as service users. Their attitudes toward education of students is below average, poor or even unsatisfactory,
For 90% of respondents among the parents and 50% of the respondents among the students, practical education should be performed almost exclusively or mostly at economic subjects.
The results of research from the aspect of the service users showed the following: a) From the aspect of the quality of teaching personnel, even 60% of respondents among the parents and students feel that the school consisted of formally adept, but not enough qualified teaching staff, and that (40% of respondents) the school has half-professional or even completely unprofessional staff, b) From the aspect of training in the application of modern IT and other technologies in the pedagogical-educational work, even 80% of the respondents among students and parents feel that students and teachers are satisfactorily or poorly trained for work, and similar opinion is shared by teachers of professional and theoretical subjects and general education subjects (60% and 50%) in the sense that they are satisfactorily trained and educated.
As far as rewards and promotions into higher professional positions are concerned, the attitudes of users of services and the teachers are almost identical. Even about 90% of respondents considered that the results of the teachers and their successes are too frequently rewarded with a certain kinds of material and other kinds of rewards.
From the viewpoint of evaluation of student achievements in education activities and their promotion in the school and the wider social environment, attitudes of the respondents were almost identical. 90% of respondents considered that the students were rewarded with high awards for achievements, and that the limiting factor of a possibly better treatment lies in the extremely poor material situation in the school and the wider social environment.

6.5. Proclaiming new or additional goals of the school

The previous survey (with open-type questions) from the aspect of validity of indicators in the formulation of important goals of the school, showed a large and dynamic set of powerful changes in the external environment of schools.
The newly set development goals of the school, not taking into account the consideration redefined basic objectives, would reflect in the following:
- The quality of education of students should not be measured only by formal characteristics of the school but by the actual (effective) qualifications of students for the ... work on the new production technologies and preparation for easy adaptation to changes of job or a workplace
- Professional education of students (practical training) should almost entirely be run at the economic subjects who use new production technologies, based on partnership relations and common interests for educational profiles required by the labor market.
- The school should stimulate the activities of students and teachers in the direction of development ... of commercial production and services of workshops, and thus prepare them for the market and economy by the end of schooling.
- Affirm international cooperation and partnership with similar schools through the exchange of students and teachers, in the function of the transfer of knowledge and skills, new IT, educational and other technologies in the educational process of schools. This is an essential precondition for the integration of the educational system of TK and BaH into modern European and world trends.

6.6. Newly set tasks of the school

As a logical set of redefined or newly set (informal) development goals of the school, there is a wide range of tasks that do not fit into the scheme "professional bureaucracy", because they cannot be found in any law or in any other form of legal regulations. Their execution implies free will, flexibility and a polyvalent engagement of the associates.
These tasks include:
- Flexible engagement of external associates for the purposes of teaching;
- Occasional involvement of prominent experts in economy;
- Establish partnership with commercial subjects;
- Organization and coordination of practical training in companies;
- Coordinating the production of projects in school and the operation of students' cooperatives;
- Daily engagement of various suppliers;
- Coordinating the work of students' community;
- Coordinating the work of Parents' Council;
- Realization of cooperation with partner schools;
- Realization of cooperation with governmental and non-governmental national and international organizations;
- Continuous professional education of teachers at economic subjects and other institutions, etc.

6.7. Informal organizational structure of schools

On the basis of functional polyvalence and overlapping multitude of new tasks in school, it is evident that the existing functional structures, on the model of Mintzberg's "professional bureaucracy" ... preclude adaptation to changes, so a divisional organizational structure is more suitable (Lipičnik, 1998, 36), which implies decentralization and teamwork. As a form of an existing informal school organization, there is an example of organizational structure on the model Handy's "clover" (Handy in Koren, 1999, 86-88), where the role of leaders (school director) is taken by both formal and informal organization.
The school staff, together with the principal were aware of the challenges from the external and internal environment. They had to choose between disruption and bureaucratic sterility of dogmatic sycophancy towards the centers of power, or to cause changes an rely on their own resources. The experience of managing organizations in other areas of life and work confirmed the theoretical position that there is no effective leadership without the ability of accepting others' ideas, delegation of tasks and confidence in colleagues, and the willingness to accept their errors in the framework of the agreed rules of the game.
In the process of transfer of powers to aides, as the basis of the formation of informal organizational structure on the model of Handy's "clover", the principal was primarily directed by personal estimation of the capabilities of associates, quite freely and autonomously, without tension and fear of the possible errors, to bring each day the essential decisions important for the life of the school.
On this basis the informal and functional grouping of tasks in the school was performed, according to the personal affinities of the associates. They directly coordinate a number of other school employees, and often

bring strategically significant decisions for the functioning of the school without the participation of the principal in making decisions.
The fields of management, which were directly distributed, are defined in the mutual relations of formal and informal communication, although the employees in these positions are considered responsible for the fulfillment of tasks, formally they do not have legal responsibility. The assistant principal of the school, the pedagogue, secretary and coordinator of practical training, each respectively or all together shape with staff (guided by a common vision and redefined "goals of the development of the school) the new flower of life, aware that they are its lifeblood.

7. FINAL THOUGHT

School, as a living organism, is not immune to changes in the environment. If the school environment is stable, its goals are explicitly committed, and the organizational structure for achieving these goals is perfectly formalized. Organizational structure of schools is necessarily informal, because only in this way it can respond to changes in the environment. As the most important arguments of positive changes in the school (according to the research of the basic goals of the school), I will point out the following:
- The formal legal framework of the functioning of the school was mostly "crushed", because basegoals were redefined and,
- Newly set development goals of the school affirmed life and adjustment to changes in the school environment. This means that the adjustment of the school to new qualitative changes in the environment is more important than mere bureaucratic forms.
- Groupings of tasks in the school are not "formalized" any more. A flexible structure of leadership was created, and a high dose of confidence in employees and their willingness to work in teams.
- Multidirectional communication and decentralization in decision-making and high level of motivation of associates for the realization of the established common goals of the school, with the willingness to work in teams, enabled the division of management responsibilities.

Necessarily, in accordance with the principles of subsidiarity and merited authority, it gave place to informal organizational structure, as an adequate response to challenges from the environment, which fully confirmed the third hypothesis of research.
As the biggest trap of or a kind of obstacle to the development of this model (and the possibility of the appearance of negative, i.e. side effects of the informal organizational structure) I see:
- Insufficiently fast formal legalization and legal affirmation of the positive effects of school in the conditions of informal organizational structure.
- Reasonable concern that in the fragmented leadership system of the school there could appear unwanted confrontations with the mechanisms of legal and legitimate organs of schools that are under the jurisdiction of law. This conflict would be disastrous for the school.
- Often paraphrased Bavec's thought imposes itself, that informal structures are the challenge of new times, and that their benefit and efficiency, i.e. value is limited in the conditions of intensive and turbulent times.

Informal organization follows the informal objectives in informal work conditions, and there is always a question whether the challenge of participation in the change is actually a sword with two blades, in achieving the noble goals of the school. Changes in the inner and outer environment of the school as a result of the globalization of education are radical and dynamic. Any insistence on maintaining old and hardened bureaucratic structures as opposed to radical changes in the external environment would be the noose around his neck for any kind of the development of the school. The development of organizational culture and climate changes on the model of "organizations which learn", would strengthen competitive advantage and the ability of the school on the market of educational services in Tuzla Canton and in Bosnia and Herzegovina.

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АНАЛИЗ УКРАИНСКОЙ И МЕЖДУНАРОДНОЙ НОРМАТИВНОЙ БАЗЫ И ТЕОРЕТИЧЕСКИХ ОСНОВ БУХГАЛТЕРСКОГО УЧЕТА ПРОИЗВОДСТВЕННЫХ ЗАПАСОВ НА ПРЕДПРИЯТИИ

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Резюме: *Исследуются особенности международных стандартов и отечественной нормативно-законодательной базы, а также анализируются взгляды украинских и зарубежных ученых по вопросам сущности и бухгалтерского учета запасов. Рассматривается соответствие отечественных нормативных документов по вопросам экономической сущности, оценки производственных запасов требованиям международных стандартов. Систематизирована и расширена классификация производственных запасов.*

Ключевые слова: *производственные запасы, первоначальная стоимость запасов, стандарты бухгалтерского учета, экономическая выгода, финансовая отчетность*

1. ВСТУПЛЕНИЕ

Экономические и социальные перемены в Украине требуют от предприятия, как основного звена экономической системы государства, повышения эффективности производства и конкурентоспособности продукции на основе внедрения достижений науки и техники, результативности форм ведения хозяйства и управления производственными процессами. Немаловажная роль в реализации отмеченных заданий отводится бухгалтерскому учету. Организация бухгалтерского учета производственных запасов предприятия основывается на применении международной и отечественной нормативной базы. Их использование дает возможность обоснованно формировать стратегию его развития, формировать планы коммерческо-хозяйственной деятельности, выявлять резервы повышения эффективности производства, давать оценку результатам функционирования структурных подразделений, осуществлять контроль выполнения управленческих решений.

2. АНАЛИЗ ПОСЛЕДНИХ ИССЛЕДОВАНИЙ И ПУБЛИКАЦИЙ

Среди производственно-хозяйственных проблем предприятия важное место отводится оценке и бухгалтерскому учету производственных запасов. В трудах известных отечественных ученых-экономистов – Герасимчука В. И., Голова С.Ф., Гуцайлюка З. В., Добровского В. Н., Єфименка В. В., Загороднего А. Г., Киндрацкой Л. М., Кужельного Н. В., Кузьминского Ю. А., Мниха Е. В, Озерана В. О., Павленко А. Ф., Петровича Й.М., Сопко В. В., Шик Л. М. и многих других исследован широкий круг вопросов, связанных с методологией и методическими подходами к организации учета и анализа экономного использования производственных запасов. В опубликованных работах отечественных и зарубежных исследователей рассмотрены проблемы определения запасов, отражения хозяйственных операций на счетах бухгалтерского учета.

2.1. Постановка проблем

Вместе с тем, значительный круг вопросов как в теоретико-методологическом, так и в практическом плане остается не раскрытыми, а именно: отсутствие однозначного толкования сущности категории производственных запасов; несоответствие требований отечественной и международной нормативно-правовой базы по данному вопросу; недостаточно полно раскрыты элементы классификации запасов; существующие счета бухгалтерского учета не в полной мере детализируют структуру производственных запасов в зависимости от их предназначения.

2.2. Цель статьи

Основная цель – совершенствование определения и классификации производственных запасов, а также методических подходов бухгалтерского учета производственных запасов на предприятиях с целью обеспечения эффективных форм хозяйствования и управления производством.

2.3. Задание исследования

– исследовать международные стандарты и отечественную нормативно-законодательную базу по вопросам оценки и учета производственных запасов;
– проанализировать теоретические аспекты и практические подходы украинских и зарубежных ученых в сфере бухгалтерского учета производственных запасов;
– проанализировать отечественные нормативные документы по вопросам экономической сущности, оценки производственных запасов требованиям международных стандартов;
– обобщить существующие в научной литературе подходы к классификации запасов и на основе их систематизации расширить существующую их классификацию;
– проанализировать украинские бухгалтерские счета и субсчета, предназначенные для отражения хозяйственных операций по движению производственных запасов;
– проанализировать отражение поступления запасов в налоговом учете украинских предприятий.

2.4. Методы исследования

Для решения проблемных заданий из выбранного направления исследования были использованы следующие научные методы: индукция, дедукция, системный анализ, синтез, группирование, сравнение, графо-аналитический и др.

2.5. Основной материал исследования

Каждое предприятие использует в своей хозяйственной деятельности запасы. Существует множество подходов к определению данной экономической категории. Рассмотрим основные из них, связанные с анализом категории запасов, как объекта бухгалтерского учета. Запасы – это активы, которые:
– содержатся для продажи в условиях обычной хозяйственной деятельности;
– находятся в процессе производства для такой продажи;
– существуют в форме основных или вспомогательных материалов для потребления в производственном процессе.

Такое определение категории «запасы» дано в Международном стандарте бухгалтерского учета 2 (МСБУ 2) [3]. Трактовка запасов, данная в Положении (стандарте) бухгалтерского учета 9 (П(С)БУ 9) [1], действующем на территории Украины, подобна представленной в МСБУ 2, за исключением того, что кроме использования в производстве, предусматривается их использование в управлении предприятием. Считаем такое дополнение вполне уместным, поскольку процесс производства является составной частью хозяйственной деятельности предприятия, а именно: не включает процессы заготовки, хранения, реализации активов, а также использование материалов в непроизводственных процессах, протекающих на любом предприятии (управление предприятием).

Общеизвестно, что существует множество классификаций запасов предприятия [12-17], согласно которым они в частности подразделяются на производственные и непроизводственные. Таким образом, определение категории «запасы», представленное в украинском стандарте бухгалтерского учета, считаем более широким.

В пункте 1 МСБО 2 также отсутствуют какие-либо уточнения относительно запасов, которые используются при осуществлении капитальных инвестиций. Одним из основных вопросов, которые раскрываются в МСБО 2, – определение стоимости запасов. Согласно пункту 6 МСБО 2, запасы отражаются по наименьшему из показателей – себестоимости или чистой стоимости их реализации. При этом в себестоимость производственных запасов необходимо включать расходы на приобретение, переработку и другие расходы, которые возникли на дату поставки производственных запасов к настоящему месту нахождения, а также приведения их в соответствующее состояние. Чистая стоимость реализации – это предварительно оцененная цена продажи при обычном течении бизнеса минус предварительно оцененные расходы на завершение и предварительно оцененные расходы, необходимые для осуществления продажи. Такой подход к отражению в учете запасов связан с тем, что в МСБУ качественной характеристикой финансовой отчетности является достоверность, а ее составной частью – осмотрительность в оценке активов.

В П(С)БУ 9 при оценке запасов используется только показатель первоначальной стоимости. В П(С)БУ 9 приведена структура себестоимости изготавливаемых запасов аналогичная с МСБУ 2. Отличием является лишь тот факт, что согласно П(С)БУ 9, в себестоимость запасов кроме расходов на приобретение, дополнительно включены расходы, связанные с доведением приобретенных запасов до состояния, пригодного для использования. Тем не менее это не означает, что в соответствии с требованиями МСБУ данные расходы не включаются в себестоимость приобретенных производственных запасов. Они включаются в себестоимость, но по другой статье, в первую очередь, как прочие расходы.

Согласно требованиям П(С)БУ 9, для целей учета запасы включают:

– сырье;
– основные и вспомогательные материалы;
– комплектующие изделия;
– другие материальные ценности;
– незавершенное производство;
– готовую продукцию;
– товары в виде материальных ценностей;
– малоценные и быстроизнашивающиеся предметы;
– текущие биологические активы.

В Методических рекомендациях по бухгалтерскому учету запасов [4], кроме указанных в П(С)БУ 9, в состав запасов включаются еще и прочие запасы. Однако при этом не уточняется, что следует понимать под прочими запасами. Отсутствуют также уточнения относительно таких запасов как тара, недостача в производстве, отходы производства.

Как уже отмечалось, в соответствии с требованиями П(С)БУ 9, производственные запасы отражаются по первоначальной стоимости. При оценке производственных запасов немаловажное значение имеет источник поступления. Приобретение производственных запасов за плату осуществляется как за наличный расчет, так и в безналичной форме, в том числе и за валюту. Согласно П(С)БУ 9 к первоначальной стоимости производственных запасов, приобретенных за плату, включается сумма денежных средств, которая оплачивается согласно договору поставщику за минусом косвенных налогов. Относительно скидок и косвенных налогов вопросов не возникает, поскольку в первичных документах они отражаются отдельно. В том случае, если косвенные налоги, оплаченные предприятием во время приобретения производственных запасов, ему не возмещаются, то предприятие включает их в первоначальную стоимость приобретенных запасов. В соответствии с требованиями пункта 5.3 Закона Украины «О налогообложении прибыли предприятий», запасы, которые приобретаются с целью их использования в непроизводственной деятельности, не включаются в валовые расходы предприятия. Следовательно такие материалы не учитываются при расчете налогооблагаемой прибыли, а поэтому не уменьшают сумму налога на прибыль предприятия. Считаем данный подход не совсем оправданным, поскольку использование запасов, например, на содержание медицинского учреждения или базы отдыха для сотрудников предприятия, направлено на поддержания сотрудников в работоспособном состоянии, что в целом способствует повышению эффективности деятельности предприятия. Согласно п. 7.4.4 Закона Украины «О налоге на добавленную стоимость», сумма налога на добавленную стоимость (НДС), которая уплачивается во время приобретения данных производственных запасов не включается в налоговый кредит. Следовательно, сумма НДС не уменьшает обязательства предприятия перед бюджетом и включается в первоначальную стоимость приобретенных запасов.

Относительно суммы денежных средств, уплаченных продавцу запасов в иностранной валюте, возникают проблемы. В П(С)БУ 9 данный вопрос не освещается. В п. 2.5 Методических рекомендаций по бухгалтерскому учету запасов [4] отмечено, что запасы, приобретенные за иностранную валюту, отражаются в валюте отчетности (т.е. в гривнах) с применением валютного курса на дату осуществления операций (на дату признания активов). Следует отметить, что в П(С)БУ 21 «Влияние изменения валютных курсов» [5] и в Методических рекомендациях [4] аналогичные требования относительно определения первоначальной стоимости импортных запасов: «операции в иностранной валюте во время первоначального признания отражаются в валюте отчетности путем пересчета суммы в иностранной валюте с применением валютного курса на дату осуществления операции (на дату признания активов)».

Оценить экономические выгоды предприятия от использования производственных запасов в будущем можно лишь при условии, что данные запасы принадлежат предприятию. Следовательно, необходимы условия признания производственных запасов активами, которые отмечены в п. 2.1 Методических рекомендаций [4]:

– предприятию перешли риски и выгоды, связанные с правом собственности или с правом полного хозяйственного ведения (оперативного управления) на приобретенные запасы;

– и предприятие осуществляет управление и контроль за запасами.

Заметим, что переход права собственности зависит непосредственно от условий договора. Условиями договора может быть предусмотрено время пересечения границы, определение таможенной стоимости производственных запасов или получения их от поставщика за пределами Украины. Именно в это время производственные запасы признаются активами и признается их приобретение предприятием. При авансовой оплате импортированных производственных запасов сумма в иностранной валюте пересчитывается в гривны на дату перечисления аванса. После чего полученная сумма учитывается при оценке производственных запасов (определении первоначальной стоимости). Однако следует отметить, что данные требования Методических рекомендаций [4] и П(С)БУ 21 на практике бухгалтера не всегда учитывают.

В подтверждение можно привести данные проверки кондитерского предприятия СУПП ТЗОВ «Оливия-вита» (Украина). Импортные производственные запасы (бобы какао), как и требуется нормативными документами, были зачислены на баланс по таможенной стоимости, которая определена для расчета налогов и платежей. Однако нормативно-методические документы, которыми регламентируется порядок ведения учета запасов на предприятии СУПП ТЗОВ «Оливия-вита» в определенной степени не согласованы с П(С)БУ, в частности порядок осуществления и отражения в учете переоценки производственных запасов.

В условиях нестабильности цен на производственные запасы предприятие для сохранения оборотных средств, осуществляет переоценку производственных запасов путем изменения их учетной стоимости как в сторону увеличения, так и в сторону уменьшения. Как отмечалось ранее, в соответствии с требованиями П(С)БУ 9, производственные запасы отражаются в балансе по наименьшей из оценок – по первоначальной стоимости или чистой стоимости реализации. В П(С)БУ 9 к первоначальной стоимости производственных запасов, кроме стоимости приобретения, включаются элементы, которые необходимо распределить (например, стоимость расходов на заготовку, стоимость транспортировки производственных запасов к месту их использования и другие расходы, связанные с приобретением и доведением их до состояния, пригодного к использованию). При условии, когда затраты нельзя распределить по каждой единице производственных запасов при их оприходовании на баланс, элементы первоначальной стоимости на протяжении отчетного периода отражаются на отдельном субсчете бухгалтерского счета 20 «Производственные запасы». Приказом Министерства финансов Украины от 14.06.2000 г. № 131 «О внесении изменений и дополнений в положения (стандарты) бухгалтерского учета» относительно товаров предусмотрен учет расходов, которые подлежат распределению, на протяжении всего отчетного периода осуществлять на субсчете 289 «Транспортно-заготовительные расходы». Однако, следует подчеркнуть, что вопрос распределения данных затрат не отражается в П(С)БУ. На предприятии СУПП ТЗОВ «Оливия-вита» транспортно-заготовительные расходы распределяются одновременно с оприходованием производственных запасов. Сумма данных расходов при осуществлении уценки производственных запасов подлежит уценке в составе их первоначальной стоимости. При осуществлении уценки производственных запасов расходы к распределению, которые учитываются на отдельном субсчете, в конце отчетного месяца корректируются на сумму, рассчитываемую исходя из удельного веса суммы уценки учетной стоимости производственных запасов в общем объеме их выбытия за отчетный период и процента расходов к распределению. Чистая стоимость реализации согласно П(С)БУ 9, определяется как ожидаемая цена реализации производственных запасов в условиях обычной деятельности за минусом ожидаемых расходов на осуществление их производства и сбыта, которые ориентировочно понесет предприятие на хранение оцениваемых производственных запасов, завершение производственного цикла, передачу их в производство. Следовательно, производственные запасы должны отражаться в балансе по стоимости, которая при реализации данных производственных запасов после даты составления баланса принесет экономические выгоды, в первую очередь – увеличение денежных средств. В том случае, когда чистая стоимость реализации ранее уцененных запасов увеличивается, то на сумму увеличения чистой стоимости реализации (но не более суммы предыдущего уменьшения) сторнируется запись, связанная с предыдущим уменьшением стоимости материалов. То есть, выполняется их дооценка, но в пределах предыдущей уценки. Таким образом, на предприятиях необходимо осуществлять аналитический учет суммы предыдущих уценок материалов. Переоценка производственных запасов в соответствии со ст. 10 Закона Украины «О бухгалтерском учете и финансовой отчетности в Украине» [2], выполняется по данным инвентаризации производственных запасов, требования которой определены Инструкцией об инвентаризации [6]. Переоценка производственных запасов осуществляется на протяжении отчетного периода в соответствии с требованиями Инструкции о применении Плана счетов бухгалтерского учета [7]. Осуществление дооценки на протяжении отчетного периода регламентировано Порядком проведения дооценки товарно-материальных ценностей [8]. Особенности отражения в учете уценки производственных запасов, связанной со снижением их качества, предусмотрено требованиями П(С)БУ 9. Расчет суммы убытков от порчи, недостачи производственных запасов регламентируется Порядком возмещения размера убытка от кражи, недостачи, уничтожения материальных ценностей. До принятия решения относительно виновного лица сумма уценки запасов отражается на забалансовом бухгалтерском счете 07 «Списанные активы», субсчет 072 «Невозмещенные недостачи и потери от порчи ценностей». После установления виновных лиц сумма к возмещению учитывается в составе дебиторской задолженности предприятия и включается в доходы отчетного периода.

Единицей учета производственных запасов является их наименование или однородная группа. Основу организации учета производственных запасов формирует их классификация по сферам деятельности, технико-технологическим и организационным признакам, которая разрабатывается на каждом предприятии в соответствии с отраслевыми особенностями.

С целью надлежащей организации учета производственных запасов весомое значение имеет их научно-обоснованная классификация. На предприятии ЗАО ВО «Конти» используются разные виды производственных запасов для соответствующих целей. На наш взгляд, наиболее обоснованный подход к классификации производственных запасов, предложен Головым С.Ф. [12, с. 171]. Он предлагает упорядочить запасы в зависимости от целей их использования:

– оценка производственных запасов и определение финансовых результатов;
– принятие решений;
– контроль выполнения.

Другие специалисты в области бухгалтерского учета запасов – Крайник О. П. и Клепикова З. В. – предлагают классификацию производственных запасов во взаимосвязи с определением себестоимости продукции и финансового результата, принятием управленческих решений, функциями контроля и регулирования на предприятии [13, с. 16]. Яковлев Ю. П. и Данилочкин С. В. выделяют конкретные направления использования производственных запасов в соответствии с отраслевой спецификой. При этом они подчеркивают, что целью классификации производственных запасов является выделение из общей массы релевантной части, именно той части, на которую можно повлиять в данный момент. Классификацию производственных запасов необходимо сочетать со спецификой производственных заданий предприятия. Линдерс Майкл Р., Фирон Гарольд Е. отмечают, что совершенствования классификации производственных запасов требуют, как правило, экономические условия ведения хозяйства [14, с. 351].

В результате систематизации существующих классификаций запасов, авторами предлагается расширенная классификация производственных запасов, как представлено на рис. 1. Предложенный подход способствует созданию соответствующих условий для организации учета и анализа производственных запасов в структурных подразделениях предприятия.

Интересные точки зрения относительно классификации производственных запасов по функциональному признаку и назначению в производстве высказывают Шеремет А. Д., Борщевский П. П., Хендриксен Е. С., Ван Бред Г. Ф., Цимбалюк А. Г., Покропивный С. Ф. Они систематизируют факторы производства по видам затрат, а производственные запасы по направлениям совершенствования технологии производства, ролью в системе управления производством. По функциональному признаку ресурсы подразделяются на трудовые, естественные, материальные, финансовые, информационные, интеллектуальные. Природные ресурсы используются для удовлетворения материальных и духовных потребностей человека. Производственные запасы, как совокупность предметов труда, используются в производстве готовой продукции. Материальные ресурсы создаются человеком в процессе трудовой деятельности. Назначение в производственном процессе, возможность окончательно перемещать первоначальную стоимость на вновь созданный продукт отличает производственные запасы от других видов ресурсов. В частности, в кондитерском производстве стоимость муки, сахара полностью переносится на печенье, изготовленное из этого сырья. Аналогично переносится стоимость используемого пара, электроэнергии, топлива, других производственных элементов, которые помогают выработке продукции, но не включаются в ее материальную основу. При этом возникает необходимость пополнять, обменивать, возобновлять использованные производственные запасы новыми после каждого производственного цикла. Производственные запасы подразделяются на основные и вспомогательные, которые используются в технологическом процессе дополнительно к основным материалам. Такие специалисты в этой области, как Тишков И. Е., Прищепа А. И. к основным производственным запасам относят материалы перерабатывающих отраслей, из которых изготовляется продукция. Вспомогательные материалы (например, красители в кондитерском производстве) используются в технологическом процессе дополнительно к основным материалам, частично включаются или не включаются в состав готовой продукции, поскольку сырье и материалы в одном случае является основным, а в другом – вспомогательным материалом. К сырью относятся полуфабрикаты, предметы труда, которые подлежат последующей обработке и отражаются в учете обособленно. Полуфабрикаты собственного производства – материалы или полупродукты, которые прошли начальную стадию обработки на предприятии. Покупные полуфабрикаты и комплектующие изделия – полуфабрикаты, приобретенные у других предприятий. Среди других видов производственных запасов в производстве кондитерских изделий значительная часть приходится на топливно-энергетические ресурсы. Топливо в процессе производства является вспомогательным материалом и отражается в учете обособленно. Различают топливо технологическое, двигательное (горючее), хозяйственное. Тара и тарные материалы также учитываются в составе производственных запасов. Различают тару, которая предназначена для упаковки продукции и тару, которая используется в производстве (например, инвентарная). Инвентарная тара отражается в составе малоценных и быстроизнашивающихся предметов (МБП) или в составе основных средств. Тара в зависимости от срока полезного использования подразделяется на тару одноразового и многократного использования. К таре одноразового использования относится тара, которая используется лишь один раз, не возвращается, не принимается от покупателей (например, бумажная, картонная, полиэтиленовая тара, мешки, бумажные коробки, тара из полимерных материалов). Тара, предназначенная для многократного использования, классифицируется по видам продукции, для которой она предназначается (например, средства упаковки, специализированные контейнеры) [4].

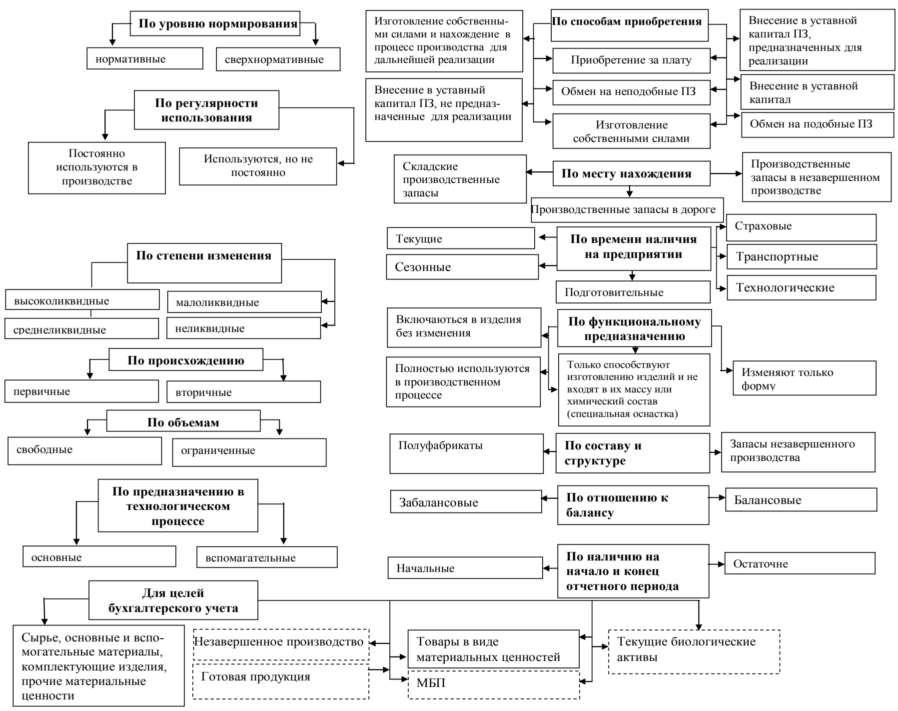

Рис. 1: Предложенная классификация производственных запасов

Производственный процесс всегда сопровождается образованием отходов. К отходам в кондитерском производстве относятся остатки материалов, которые образовались в результате технологической обработки, потеряли полностью или частично качество, присущее данному виду материалов (например, форму). На наш взгляд, целесообразно выделить в отдельную группу отходы производства, поскольку они сохранили потребительские свойства и могут быть использованы в дальнейшем. Полученные в процессе производства отходы, классифицируются на возвратные и безвозвратные. Возвратные отходы – отходы, которые используются без дополнительной обработки как исходная заготовка в собственном производстве и реализуются другим предприятиям. Авторы согласны с мнением Керимова В. Э. и Сингаевского И. О., которые безвозвратные отходы считают потерями в производстве, поскольку они не имеют потребительской ценности, не используются в производстве и не реализуются на сторону (например, невидимые отходы – пар).

В соответствии с Инструкцией [7], для учета производственных запасов предназначен второй класс Плана счетов «Запасы», на котором отражаются производственные запасы:

– по которым риски и выгоды, связанные с правом собственности на них, перешли к предприятию;

– данные производственные запасы находятся под полным его контролем.

Следовательно, когда предприятие приобрело производственные запасы, а право собственности не перешло к нему, производственные запасы не признаются активами предприятия и отражаются на забалансовых счетах класса 0. Счет 22 «МБП» предназначается для учета и обобщения информации о наличии и движении МБП, которые принадлежат предприятию и находятся в составе запасов. Однако ни одного определения понятия «малоценные» в Инструкции [7] не дается. Отмечено, что к МБП относятся предметы, которые используются не больше одного года или нормального операционного цикла при условии, что он длится больше года.

Авторами была проанализирована хозяйственная деятельность предприятия ЗАО ВО «Конти», которое имеет подсобные производства, предназначенные для обслуживания основного производства (например, ремонтный цех). Прямые и косвенные расходы на производство отражаются по дебету бухгалтерского счета 23 «Производство» на отдельных субсчетах. Списание данных расходов осуществляется по кредиту счета в корреспонденции с дебетом счетов 11 «Прочие необоротные материальные активы», 22 «МБП» и субсчетов учета расходов основного производства. Поскольку предприятие осуществляет нескольких видов деятельности, имеет вспомогательные производства, следовательно, для каждого из них следует предусмотреть отдельный субсчет. По дебету счета 23 отражаются не только расходы производственных запасов на производство продукции, но и другие расходы, такие как заработная плата, отчисления в социальные фонды, амортизация. Таким образом, данные расходы могут включаться к первоначальной стоимости (производственной себестоимости) готовой продукции, но не все они превращаются на запасы (готовую продукцию). Именно по данной причине в соответствии с п. 5.9 Закона Украины «О налогообложении прибыли предприятий» остатки запасов, в том числе в незавершенном производстве (по дебету счета 23) учитываются отдельно от других расходов производства.

В соответствии со ст. 9 Закона Украины [2], основой бухгалтерского учета хозяйственных операций являются первичные документы, которые фиксируют факты осуществления данных операций. Оформляются первичные документы при осуществлении каждой хозяйственной операции, согласно требованиям Положения о документальном обеспечении записей в бухгалтерском учете [9]. С этой целью используются первичные документы типовой формы. Если такая форма не отражает специфику деятельности предприятия, предусматривается возможность использования другой формы, которая разрабатывается самим предприятием в соответствии с требованиями Положения [9]. Для учета производственных запасов, в соответствии с требованиями приказов Министерства финансов Украины «Об утверждении типовых форм первичных учетных документов …» [10], определены другие формы первичных документов для отражения хозяйственных операций. Следует отметить, что используются также специальные формы бланков для учета особо ценных видов производственных запасов. Такие сопутствующие документы, как платежное поручение и налоговая накладная, предприятия также отражают в своей учетной политике.

На предприятии СУПП ТЗОВ «Оливия-вита» поступление бланков доверенностей отражается по дебету субсчета 209 «Прочие материалы». Одновременно на забалансовый счет 08 «Бланки строгой отчетности» зачисляется стоимость этих бланков, исходя из цены за один бланк не меньше 0,1 минимального размера заработной платы, установленного законодательством Украины. В случае порчи, потери, хищения бланков доверенностей, выявленных инвентаризационной комиссией, которая назначается руководителем предприятия, составляется акт. Если виновное лицо установлено, то оно должно возместить сумму убытка, рассчитанную согласно требованиям Постановления КМУ о порядке определения ущерба от хищения материальных ценностей.

Контроль поступления и выбытия производственных запасов осуществляется в процессе проведения инвентаризации, требования которой определены Инструкцией [6].

На анализируемом предприятии СУПП ТЗОВ «Оливия-вита» результаты проведения инвентаризации оформляются инвентаризационной ведомостью, утвержденной Постановлением комитета СССР «Об утверждении первичных форм учета…» [11]. На каждый вид инвентаризируемых производственных запасов комиссия оформляет «Инвентарный ярлык» (форма № инв-2), который фиксирует количество пересчитанных материалов. При поступлении производственных запасов материально ответственное лицо регистрирует их поступление в присутствии членов комиссии. Подпись одного из членов комиссии на обратной стороне «Инвентарного ярлыка» подтверждает, что были сделаны все соответствующие записи относительно поступления материалов. Накладная или лимитно-заборная карта, на основании которых фиксируется количество выбывших производственных запасов в реестре приходно-расходных документов, и ее копия прикладываются к реестру. Они служат дополнением к «Инвентаризационной ведомости». На наш взгляд, данный метод контроля за движением производственных запасов имеет определенные недостатки: он применяется к уже проинвентаризированным производственным запасам, поскольку лишь для них предусмотрен «Инвентарный ярлык». Другие производственные запасы, которые инвентаризируются, но пока не пересчитаны, «Инвентарного ярлыка» не имеют, следовательно, их движение зафиксировать сложно. Следует отметить, что оформление «Инвентарных ярлыков», включение в них данных относительно движения производственных запасов во время инвентаризации довольно трудоемкая работа, поскольку данные в «Инвентарном ярлыке» отражаются в «Инвентаризационной ведомости» и в документах на поступление и расход, реестр которых (с их копиями) является неотъемлемой частью данной ведомости. В «Инвентарном ярлыке» фиксируется количество имеющихся на дату подсчета производственных запасов, которые не совпадают с количеством на дату проведения инвентаризации. Следовательно, данные в «Инвентарном ярлыке» могут отличаться от данных в «Инвентаризационной ведомости». Именно по этой причине при проведении инвентаризации производственных запасов зачастую отказываются от «Инвентарных ярлыков».

В результате проведенной проверки на предприятии СУПП ТЗОВ «Оливия-вита» был выявлен ряд проблем с распределением инвентаризированных производственных запасов по видам, поскольку сырье и полуфабрикаты учитываются отдельно и на отдельных счетах. Таким образом, на дату проведения инвентаризации у материально ответственного лица был материальный отчет с указанием наименования каждого вида производственных запасов. Они были распределены в зависимости от принадлежности по бухгалтерским счетам и субсчетам. Каждому наименованию производственных запасов предусмотрена отдельная «Инвентаризационная ведомость», которая позволила упростить их отражение в бухгалтерском учете. Однако такая ведомость Инструкцией [6] не утверждена. Считаем необходимым отметить такой недостаток Инструкции, как отнесение к инвентаризированным такие производственные запасы, которые отгружены покупателям, но не оплачены в определенный срок. Подчеркнем, что оплата производственных запасов (своевременная или несвоевременная) для инвентаризации не имеет значения. Принципиальную роль играет наличие таких производственных запасов на балансе предприятия или на забалансовых счетах, в частности, на счете 023 «Запасы на ответственном хранении». Инструкцией [6] также не определен порядок проведения инвентаризации производственных запасов, которые не принадлежат предприятию. Отмечено, что на такие производственные запасы составляется отдельная инвентаризационная ведомость. Относительно возможности инвентаризации производственных запасов, которые комиссия не в состоянии взвесить и пересчитать, также ничего не сказано.

Поэтому, по нашему мнению, их необходимо инвентаризировать не в натуральных измерителях, а по данным первичных документов и учетных регистров. Отдельных реестров по учету производственных запасов, которые находятся в дороге, предприятия не ведут, следовательно, составить их полный перечень достаточно проблематично. Стоит также подчеркнуть, что материалы в дороге могут находиться меньший период времени, чем продолжается инвентаризация. Следовательно, в первый день инвентаризации нужно получить от материально ответственного лица документы об отгрузке производственных запасов, которые на начало инвентаризации находятся в дороге.

На предприятии СУПП ТЗОВ «Оливия-вита» результаты инвентаризации оформляются инвентаризационной ведомостью материальных ценностей, принятых (сданных) на ответственное хранение (форма № инв.-5), а находящиеся в дороге – актом инвентаризации материалов, которые находятся в дороге (форма № инв.- 6), как представлено на рис. 2.

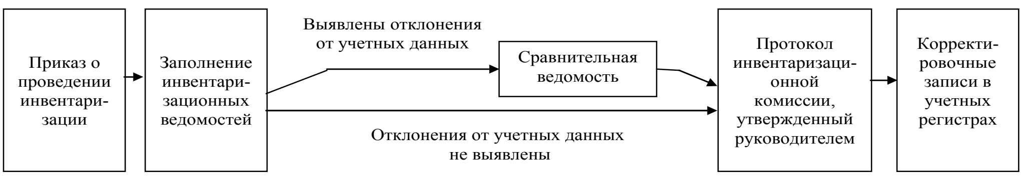

Рис. 2: Документальное оформление инвентаризации производственных запасов на предприятии СУПП ТЗОВ «Оливия-вита»

На предприятии СУПП ТЗОВ «Оливия-вита» этиловый спирт и изделия из спирта инвентаризируются ежемесячно путем измерения. Один раз в год, когда имеются минимальные остатки спирта, он инвентаризируется путем измерения. Ежемесячная инвентаризация путем измерения проводится с целью оперативного контроля за использованием спирта, его остатками без отражения в складском и бухгалтерском учете. Для этого используется ведомость пересчета остатков незавершенного производства и полуфабрикатов в первоначальном сырье (форма П-34К), которая заполняется на основании инвентаризационной ведомости материальных ценностей (форма № инв-3) и накладной на внутреннее перемещение (формы № М-12 и № М-13) при передаче полуфабрикатов в другие цеха.

3. ЗАКЛЮЧЕНИЕ

Результаты проведенного исследования дают возможность сделать следующие выводы.

Многовариантность толкований экономической сущности производственных запасов как объекта учета в международной и украинской нормативно-методической базе, а также существующих исследованиях вызвала необходимость толкования их как товарно-материальные ценности, предметы, на которые направлен труд человека с целью получения готового продукта, выполнения работ, предоставления услуг, которые потребляются полностью, целиком переносят свою стоимость на этот продукт и заменяются после каждого производственного цикла. Такое определение углубляет теоретико-методические основы исследуемого объекта учета и раскрывает его место в хозяйственной деятельности предприятия.

Неопределенность в большинстве проведенных исследований классификационных признаков производственных запасов обусловила необходимость предложить методический подход, согласно которому исследуемый объект учета систематизируется по регулярности применения, времени наличия на предприятии, функциональному назначению в хозяйственной деятельности. Усовершенствованная авторами классификация производственных запасов по структуре может служить основой для построения их номенклатур с учетом специфики отрасли. Это способствует созданию соответствующих условий для организации учета и анализа производственных запасов в структурных подразделениях предприятия.

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DIRECTOR IN MODERN SCHOOL

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Summary *Usefulness of management in education and achieving the organization goals can be seen leaving in classic, "outdated" static - functional principles of business and emphasis to variable and flexible organization business. Successful manager - a good manager must have a very good formal education is necessary to permanently innovate and upgrade. In everyday practice, schools face two types of leadership, autocratic and democratic. Democratic governance means that the Director position (as manager) in the collective employees watching the interaction. Democratic way of management basically means self-respect and respect for other people, but the possession of skills and motivating employees. It requires the development of the view that the tasks and goals of modern school can only make adequate investment in human resources. Making a quality system is needed in all areas of activity and work, and in education that affect the development of society as a whole. To be a successful manager in their activities, such as: professional competence, the ability of management and organization of school work, fairness in the division of duties and responsibilities and the organization and coordination of work in the school on the way.*

Keywords: *education, director, manager, school, coordination, autocratic and democratic leadership, motivation, quality*

1. INTRODUCTION

Law on the basis of the education system and education in the field of education arranged in a unique way the basis of the education system and education and that, among other things related to managing work and school. The law regulated the issue of performance management and educational - educational institutions. Also, this question shall be regulated by the statute, and each school.
"For the school director may be elected a person who has higher education, the license for teachers, pedagogues and psychologists, passed the exam for Director of the institution and at least five years of working experience in the field of education and education" [1].
Are the stated conditions sufficient for modern school to have a successful manager in charge? Of course not.

2. MANAGEMENT IN EDUCATION

In the process of transition of our country, rapid changes in the environment before the leaders of educational institutions and set a number of requests. Achieve goal in the given time and available resources requires a flexible approach to organizing activities and efficiency in their implementation.
Management, control or management is a separate scientific discipline, a multidisciplinary character, which explores the problems of managing business endeavors and social systems.
Usefulness of management in education and achieving the organization goals can be seen leaving in classic, "outdated" static - functional principles of business and emphasis to variable and flexible organization of business and that changes shape with the projects that are implemented.
Successful manager - a good manager must have a very good formal education. However, the time it lost its power as the practice manager is carried out in rough environment, and it is necessary to permanently innovate and upgrade their knowledge and experience.
Back half a century believed that the formal education enough to someone, with shorter or longer work experience became manager. Experience and intuition have been sufficient to more or less successfully manage the company.

Development of science and technology today, a condition that is spontaneously formed a view of the need for permanent education manager.
There are several ways of education of leadership staff and they are:
- Information seminars
- Basic courses
- Programs for the development of managerial personnel
- Graduate studies for managers

How are the directors of the schools willing to educate, build and expand their knowledge, opinions are divided. On the one hand, we have ambitious directors that improve in areas of their titles, but also those who believe that there is no "art of management" and that will make their way in his role, and without acquiring additional knowledge.

3. ROLE OF A MANAGER - DIRECTORS IN MODERN SCHOOL

One of the most important agents of socialization of the society is in school. In their business policies and how to work as well as the socialization of children is reflected in most explicit values of a society in transition.
"The crisis of school - by the byword, it is nothing other than school or schools in transition at the crossroads of values, ideology and society. Conduct of business policy and manage the people, in this context, is a separate challenge.
The present school directors, the center of the different forms of influence. From one side are the requirements the Ministry and with other teachers, children, parents. The fact that most school directors, teachers or professors, certainly is a factor making it difficult. And why? Just, work of director is significantly different from the teaching staff. Appointment of Director of past teachers and professors are faced with tasks grouped into five management functions.
- Planning;
- Organization;
- Management;
- Personnel functions;
- Function control.

And how will they "manage" depends primarily on their personality, ambition, flexibility ...
What are the characteristics that a successful manager - a manager should possess:
- High energy potential and tolerance to stress;
- Self-confidence;
- Orientation to the inner focus of control;
- Emotional maturity;
- Striving for power;
- Moderately high degree of orientation towards achievement;
- Moderate level of need for affiliation; ...[1]

In modern business practice and school work today to meet two types of leadership, autocratic and democratic.
When it comes to the way in which executives try to encourage the activity-oriented work in autocratic manager is a typical reaction - and in with the democratic-oriented - interest employees for a job. For autocratic leaders employed the people who need to hear, and they are democratic potential that need to invest.
When employees make mistakes authoritarian goes for punishment, while the Democrats try to identify the causes. And the definition of management, these two types of the limb. Always keep an eye to employees - considered to be authoritarian while holding democratic thesis - motivate employees to work.
And finally, the maximum penalty for directors - autocrat the loss of position, a democratically oriented manager - loss of respect by the employees.
Propagation of condition less democratic way of management is part of our everyday life. However, the story is still a little complex.
Democratic leadership means in particular the management when it comes to the Head, but when it comes to employees as participants in this form of interaction. Even the beginning of the twentieth century, Mary Parker Folet defined management as "art to notice things with people." To someone before the democratic way of management in the basis should have self-respect and respect for other people, but the possession of skills and motivating employees.
Motivation of the leaders most is the function of which the manager must understand human behavior - to stimulate and lead others to achieve the organization goals.
Prejudice that people who choose their profession faculty interest to make because they are motivated to practice internal pedagogical work and to elements external motivation is not necessary. True, but how long the internal motivation can be a starter good teachers? Of course not always.

Second prejudice, totally contrary to the previous is that the quality of teachers is directly related to their financial position. Opinion that the solution of all problems that occur in our system of education addresses the improvement of financial position of employees in educational institutions is also wrong.

Teacher through your entire professional life can not permanently be effective in performing its job, only time that the internal motivation for engaging in educational work. On the other hand, money as motivation, means that people associate their potentials with the organization goals and in the exercise and their personal and professional goals.

To democratic governance was functionally important is to create preconditions for mature attitude toward work and management of all employees in the school. Successful management requires the development of the view that the tasks and goals of modern school can achieve only if we are adequately investors in human resources. Since the school non-profit institutions and the possibility of motivation of employees are limited. But every successful manager will find ways to succeed in this.

4. QUALITY OF SUCCESSFUL DIRECTOR IN MODERN SCHOOL

Making a quality system is needed in all areas of work and so the education that affect the development of society as a whole.

What are the qualities necessary to be a successful manager?

Professional competence:

- Head has professional knowledge and organizational abilities, expressed;
- Are regularly improving the organization and management.
- Plan their professional development, report and implement the leading in the record;
- Their work and behavior is used for example to all in the school;
- Contributions of the reputation of the school.

Leadership abilities:

- Develops confidence, motivated and organized team work;
- Ready for taking responsibility when the sea alone to decide;
- Enables and supports the permanent professional training of teachers;
- Develops self-criticism and responsibility;
- Requires the implementation of commitments;
- Taking into account the different opinions and provide communication based on mutual cooperation and respect;
- Conflict situation successfully transcends or associates;
- Timely and properly inform all employees for the improvement of the life and work of the school;
- Develops cooperation with parents;
- Collaborated with the school boards in the development progress of the school;
- Provides for the participation of students in the decision-making in the organization and life of the school;
- Provides school site.

Organization of Schools - Division of duties and responsibilities:

- Head of shared obligations and responsibilities to employees in accordance with the law and on the basis of expertise, knowledge and skills;
- When the division of duties and responsibilities taking into account that they are clear, precise and timely and to contribute to the effectiveness and efficiency of school work.

Organization of school work - Manage and co-ordinate work in the school:

- - Head of the old to the appropriate division of tasks to be included in all aspects of life and school work;
- Head of care in the school there is good coordination of the organs of management, professional bodies and other services;
- Old to all in the school aware of the resources that they are available, which contributes to greater effectiveness in the school;
- Obligations and responsibilities non-teaching staff are well organized and coordinated and implemented the quality, according to the established deadlines. 3)...

Previous research in this field have shown that in practice the above descriptions, which are dominated by most desirable situation where a strong hand, are not present in fully, accurately, there are to a lesser extent. This requires taking certain actions to eliminate the observed weaknesses and remedy shortcomings.

With right is considered to be no suitable soil and the best way there is no need management support. On building friendly climate, a pleasant working atmosphere, the satisfaction of employees, implementation of tasks and goals of school, all need to give its maximum, certainly with a good director - manager at the high position.

5. CONCLUSION

On the basis of a stated in the work could be concluded that:
1 - Being a successful manager in the modern school is not an easy task. For those who understand it is a serious challenge.
- Set himself the aim and brave "grab" forward.
- With the support of the group, a positive climate and team work is easier in this work.
- - To create the right business conditions and work required is a huge will and desire, knowledge and skills.
2. - Slot for the democratic with the maelstrom of change and time in the modern school is the way of success, but why not, in some situations (and the bad are inevitable in the work of the people) take and autocratic attitude, if you will be a means to achieving goal.
3. - No suitable soil and the best way of management do not need support
because the building friendly climate, a pleasant working atmosphere, the satisfaction of employees, the achievement of tasks and goals of school, all to give its maximum, with the principal, a good manager at high position.
4. - Establishment of the quality system is needed in all areas of business and work, and in education, especially as it strongly affects the overall development of the society.
5. - Successful management requires the development of the view that the tasks and goals of modern school can achieve only if we are adequately investors in human resources.
6. - With the school as the non-profit institutions and the possibility of motivation of employees are limited and every successful manager must find ways to succeed in this.
7. - School management should be entrusted to professional and nice people.
8. - The selection of school leaders should be run as the principle of greater transparency and use the institution of the competition.

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MANAGING VIRTUAL SUPPLY CHAINS

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Summary: *During the past period, a combination of economic, technology and market forces has compelled enterprises to examine and reinvent their supply chain strategies. Some of these forces include the process of globalization, the proliferation of product variety, increasing complexity of customer demands and the shortening of the product life cycles. To stay competitive, today's organizations have strived to achieve greater coordination and collaboration among supply chain. Wide use of Internet-based technologies and communications to execute both, front-end and back-end business processes has emerged as a key enabler to drive virtual supply chain. The convergence between e-business and supply chain management concepts can facilitate all the benefits of collaboration and integration in a supply chain, manifested in reduced costs, increased flexibility, greater transparency and efficient customer response.*

Key words: *supply chain management, virtual supply chain, virtual organization, virtual team, information technology*

1. INTRODUCTION

The gap between demand for consumer goods and their efficient supply is greater now than at any other time, and is widening as consumers' wants become less predictable, and suppliers struggle to meet them. Each of the customer segments has a set of requirements to be fulfilled by the supply chain. At times, these requirements are diverse or conflicting in nature. In order to meet the global competition and to grain competitive advantage through logistic excellence, companies need to find out a creative ways in solving logistic problems.

To survive in this highly demanding and competitive marketplace, organizations must improve inventory turnovers and flexibility to meet customer requirements. The current international business environment requires innovation across the entire business processes, which key factors mostly are supply chains. Implementing a new model of supply chain sometimes may require entire business processes reengineering. Modern manufacturing enterprises must collaborate with a large number of suppliers to design and produce their products.

To satisfy all these requirements, virtual supply chains need to be designed and managed in an appropriated manner.

The great requirement that stands in front of the companies today is to move their business model toward virtual supply chain management and to develop a frame for enhancing supply chain performance.

Virtual supply chain needs to satisfy consumers' needs in most efficient and profitable way, avoiding the well known bull whip effect. These supply chains need to have their own set of stocking, ordering, planning and execution policies and are governed by their own performance metrics. Management of these supply chains is of the crucial significance. Through the implementation of a web-based supply chain, using world-wide telecommunications technology the enterprise improve the quality and flexibility of its master production schedule which results in a considerable cost savings and enhanced customer service levels.

While in the past period of time the most visible manifestation of the Internet has been in the emergence of electronic commerce as a new retail channel, it is already obvious that it will have an even more profound impact on business-to-business interaction, especially in the field of product design and development, procurement, production, inventory, distribution, after-sales service support and marketing, in order to achieve efficient supply chain, considered as a new business model.

The aim of this paper is to point out main characteristics of a concept known as a virtual supply chain that will potentially enable organizations that are physically remote from each other to operate processes and obtain high level of performance.

2. VIRTUAL SUPPLY CHAIN AS A BASIS OF CREATING A VIRTUAL ORGANIZATION

2.1. What is virtual organization?

The concepts of 'virtuality' have different connotations in literature. The term 'virtual' has its origin in the Latin word 'virtus' which defines an attribute of a thing which has the possibility of existing, but does not really exist. On the contrary to this meaning of the term, virtual organization has a very real existence. According to this, the term 'virtual' is used to describe the items with ability to achieve greater potential than they actually have, and comes from 'virtual memory', not from 'virtual reality'.

Virtual organization has been variously defined in the literature. It is defined as a temporary network of companies that come together to exploit fast-changing opportunities. [12] Virtual organizations are new form of organizational structure. Today's organizations are faced with a dynamic and turbulent environment that requires flexible and fast responses to changing business needs. The ways that virtual organizations use to respond to these environment requirements determine their chances to succeed. The important issues for an organization are decision to pursue consumers electronically and organize its operations virtually. As the concept and use of virtual organizations grows, it is necessary to gain a better understanding of how the virtual economy operates.

Main characteristics of virtual organizations are adaptability, flexibility and the ability to react quickly to changes in the market. The primary motivation for forming virtual organizations is cost reduction. A second motivation is that contracting out more peripheral functions allows an organization to concentrate all of its energy on its core business. Despite the potential advantages of virtual organizations, this type of organizational design also has its drawbacks. When an organization enters into a partnership with a supplier, it is assuming some degree of risk. Another potential drawback of virtual organizations is that they make it difficult for an organization to maintain a coherent culture. This may also explain why some organizations known to have very strong and distinct cultures have not made extensive use of the virtual organization concept. Nevertheless, entering into such a relationship is, to some extent, entering into the unknown. The only way for organizations to deal with this uncertainty is to thoroughly investigate potential business partners before entering into relationships.

In practice, a virtual organization that can take one of the following forms: an organization that outsources the majority of its functions or independent organizations that share resources to achieve their goals. In the context of a virtual organizations and value chains, it is also necessary to take into a consideration a phenomenon of a value network, as an actual paradigm. Namely, the traditional concept of a linear value chain given by Michael Porter, cannot provide appropriate answers in terms of increasing instability and market uncertainty. Growing importance of information technology acquires a new model, named value network, which implies inside, and the outside value network.

One of the most significant characteristic of a modern business management is that individual organizations no longer compete as isolated autonomous entities at the market, but rather as a supply chains. This new organizational model redefines the traditional boundaries of the company, making hard to determine where one company ends and another begins. Such models require radical rethinking of many aspects of traditional business.

Management has changed from traditional, considering planning, organizing, leading and controlling to the new concepts as learning, transformation and performance. The organization needs to develop ability to rapidly anticipate changes and then transform itself into a completely new entity. [16]

Some of the benefits of virtual organizations are related to:

- improved efficiency
- improved performance
- increased recruitment
- greater accountability
- greater business agility
- reduced costs
- availability across time zones.

The virtual organization, as an e-business organization model, provides an organizational framework that facilitates the coordination and cooperation between virtually partners that communicate through electronic network. Virtual organizations are also temporary operational units that are configured on market opportunities and customer needs. Moreover, virtual corporations are characterized by integrated cooperation between independent and dispersed partner organizations, but, they can take the form of supply chains, joint research and development projects and any other form of vertical or horizontal partner cooperation. The need for increased flexibility in responding to market demands emphasizes significance of virtual, agile and seamless organization.

2.2. Conceptual model of virtual supply chain

Supply chain management (SCM) and virtual organization are concepts that have been adopted world wide. These concepts encompass a set of managerial, organizational and technological issues focusing on the establishment of partnerships and cooperation among companies with the purpose of achieving competitive advantages and exploiting market opportunities. Supply chain management is based on the idea that companies should run strategically and be holistically integrated with their key suppliers and customers. A virtual organization can be considered as a dynamic and temporary form of cooperation among companies, in which different partners join complementary competencies to exploit a specific business opportunity.

The virtual supply chain is a result of convergence between information technologies and organization. Any chain connected through electronic links can be considered virtual. However, a virtual supply chain often encompasses much more than electronic links, it represents an organization structure that facilitates efficient and effective flows of both physical goods and information in a seamless fashion. What distinguishes the virtual chain from the traditional supply chain is its inherent flexibility to quickly adopt and adapt to changes in the business environment. As a result, new members can be continually added and old members deleted or have roles reassigned to them within the chain. Consequently, the ability to reconfigure organizational structures, provides the chain the capability to customize solutions for different segments of customers or keep up with changes in customer requirements. This adaptability of the chain is likely to lead to competition between chains rather than between organizations.[17]

In global competition, the focus is on:

- building on core strengths
- provision of real-time information
- globalizing service demand
- visibility of key performance indicators
- collaboration in supply-chain operation
- e-Commerce development. [6]

Each partner contributes to virtual supply chain its core capabilities, skills, they share costs and enable access to different markets. The fact that each partner is dependent and rely on others, require a large amount of trust among them. Internet has become more important than ever in supply chain management, because it make possible to accurately and securely interact with partners or customers in real-time and, in the instance, organizations are achieving considerable advantages. It is important to realize the impact of the Internet and associated technologies on two related aspects of business: electronic commerce and virtual organization.

On the one hand, the tendency towards concentrating on core competencies has been resulting in the fact that individual companies cover smaller parts of the total value creation process. This tendency increases the need of companies to be included in many different value chains in order to market and exploit their specialization and core competencies. On the other hand, this development increases the dependency on other, more powerful value chain partners, as well as the need to coordinate the activities along the supply chain. The different business environment demands clearly understanding of importance of virtual supply chain partners need for integration and cooperation with other partner firms in dynamically formed and temporally operated virtual organizations. Problem with which partnering companies are to deal, is how to find suitable partner companies with complementary competencies, how to establish a trust-based partnership in a very short period of time and how to coordinate the activities of the geographically and organizationally dispersed, but also independent partners.

The virtual supply chain model consists of logistical and informational elements integrated into its structure in order to minimize all activities that do not add value. According to this model, virtual supply chain has four phases: 1. plan, 2. source 3. make and 4. deliver. Each phase has its own information system modules that are integrated with other phases of the supply chain with the objective of promoting open communication among the partners. [6] The key is in integration and connectiveness achieved by interorganizational information systems.

By implementing an internet-based supply chain, organization can achieve enhanced visibility across the supply chain, reduced inventory costs and increased customer and supplier satisfaction.

2.3. Virtual team

Team management is always a challenge but when there is a need to manage teams across distance and time zones, the challenge is even greater. One of the most important preassure that managers are faced to, is how to manage people in the virtual organization. They need to be aware that usage of new technologies brings a new ways to manage.

The nature of teams has changed significantly because of changes in organizations and the nature of their work; organizations have become more distributed across geography and also across industries. Traditionally, people worked in teams side by side, in the same space, at the same time on interdependent tasks for the same organization. After that, a cross-functonal team as one form of a virtual team appeared. Today, one of the present forms of a virtual team is a cross-organizational team, provided by widely distrubuted information and communication technology. One of the greatest challenge is to manage teams that are both distributed and cross-organizational teams, involving people from different organizations who work in different places. Virtual team in general can be defined as a group of people who interact through interdependent tasks guided by common purpose, works across space, time, and organizational boundaries with links strengthened by webs of communication technologies [6] According to a concept of virtual suply chain, existance of cross-orgnizational virtual team is essential.

Although virtul teamworking has many potential advantages for supply chain efficiency, it also has a several potential disadvantages. Virtual groups may provide flexibility, responsiveness, lower costs, improved resource utilisation, and a stress reduction as a result of not having to travel long hours to the office.[7] In addition to supporting virtual teams, new Internet and Intranet technologies can create ways for the whole organization to function as a network of virtual teams. For most virtual teams, the main aim is to enable synchronous communication and interaction because of the scarcity of time, as a very important resource. Time management obtains a predominant role.

Today, technolgies allow people to interact and deal with pressing issues electronicaly instead of attempting to find a common time and place for a group meeting. One of the most efficient ways to achive high quality communication and information sharing in real time among the team members is comunication by using a videoconference. Although electronic communications devices including mobile phone, fax, e-mail and videoconferencing have improved greately over the past few years, in certain occasions, they cannot replace real face-to-face communications or synergy created during the common tasks fulfillment.

All these changes in organizations have changed how teams are formed and how they operate.

Table 1: Comparative characteristics of 'conventional' (traditional) and virtual teams [16]

'Conventional' team	Virtual team
fixed team membership	Shifting team membership
All team members drawn from within the organization	Team members include people from outside the organization
Team members are dedicated 100% to the team	Most people are members of multiple teams
Team members are co-located organizationally and geographically	Team members are distributed organizationally and geographically
Teams have a fixed starting and ending point	Teams form and reform continuously
Teams are managed by a single manager	Teams have multiple relationships with different parts of the organization at different times

3. VIRTUAL SUPLY CHAIN RISK MANAGEMENT

Collaboration between supply chain partners facilitated by integation of information flows, creats more efficient and effective supply chains. As information technology increasingly becomes the medium of business functionality, a reliance on secure and continued operations has redifened corporate risk. Though essential to support collaboration, increased use of information technology has removed internal and external protective barriers around an organization's assets and processes. Thus, supply chains are better able to satisfy the needs of customers, but also are more vulnerable to a risks specific for IT. For appropriate risk management, first step is identification and categoryzation of all risk sources and possible concequences. Risks related to a virtual supply chain can be put into three main categories:

Environmental risks, the most encompassing category, can affect the four prior sources of risk within their root categories. They are any uncertainties that occur as a result of an interaction between supply chain participants and the environment. Environmental risks could result from socio-political actions, accidents, and these events may be far removed from an organization, but their effect could be passed to other network organizations or associated supply chains.

Network risks occur due to interactions between organizations linked in a supply chain. Organizations must procure materials from upstream suppliers and to sell finished goods through a distribution network. However, there are risks associated with interactions between supply chain participants. Unexpected events may occur during acquisition, transportation, and employment of goods and services that negatively affect an organization's ability to serve its customers.

Organizational risks are the are those found within the boundaries of an organization and include labor, production, and IT system uncertainties. The most common types of organizational risks are process and control risks. Processes including production, sourcing, warehousing, transportation, and planning and scheduling are the activities that add value to an organization. Disruption to the execution of these processes is known as proces risk.

Supply chain risk is definitely in a certain level affected by IT threats, and therefore the benefits of collaboration facilitated by IT integration must exceed the increase in risk due to IT security threats.

Various information risks that could impact the supply chains can be broadly categorized as:

- information security risks,
- information distortion and bull whip risks,
- intellectual property rights risks,
- information technology outsourcing risks,
- information system breakdown risks. [15]

The experience shows that as supply chains become virtually integrated, the risks of information distortion and bull whip are reduced. But the benefits of virtual integration can be fully realised only if proper strategies to manage other information risks are in place.

Usage of information technology which provides the basis for greater information transferability is necessary, but lack of knowledge about information risks, lack of supply chain wide policies to manage information risks, lack of resources, lack of commitment, lack of trust, and lack of IT expertise can lead to decreased supply chain performance.While greater reliance on a virtual supply chain provides flexibility in response to unpredictable market conditions, on the other side, its potential could be limited by serious lack of standards for information system.

4. VIRTUAL COLLABORATION AND INTEGRATION

Collaboration among different parties is necessary in the virtual supply chain, as this is the only way in which this business concept can be successful. Collaborations in the supply chain have become crucial to organizations in order to gain superior performance and create sustainable advantages

A virtual supply chain needs to be able to support both 'arms length' relationships and collaborative partnerships. The choice of which to adopt is not a function of technology, but rather good supply chain management. Rapid time-to-market expectations and the demand for customized products present real challenges for the rigid and fixed linear supply chains that compete in today's economy. Connective technologies meet these challenges head on by integrating the necessary people, information, and products beyond their current limitations.

Virtual integration instead of a traditional vertical integration that provides information exchange among the partners in supply chain in real time, could be a kind of an answer to the problem of uncertainity and instability in virtual supply chains.

4.1. The significance of information sharing across the supply chain

Essential for a success is open communication and shared information in every stage in order-to-deleivery process. The main goal to be achieved is exchange of informations among members of a virtual supply chain on real time basis. One of the keys to the successful implementation of the virtual supply chain concept is the accurate exchange of information across the supply chain that must be overcome. The most serious is that the companies participating in a particular supply chain are independent and frequently compete against one another. They may not want to share information with their competitors, so security control will be a significant issue in such an environment. The second problem is that each company has a different set of software applications and business practices. These differences will make it difficult to implement a set of common databases. The information produced by the software in one company cannot be processed directly by the software in another company. Otherwise, each company's software applications may be complex and require extensive training to be used correctly. The solution to these problems lies in the careful development of business, logistics, and information models. Even if applications have a common understanding of the information they share, they must still exchange that information. The technology used to exchange that information must be cost-effective, reliable, and hardware independent. [9]

The key role in this field play internet-based technologies. The Internet is an efficient electronic link between different entities, and has proven to be almost ideal platform for information sharing. Otherwise, Internet has become more important than ever in supply chain management, beause it make possible to accurately and securtely interact with partners or customers in real-time.

In the new business model, virtual supply chain, information sharing and partner relationships are emphasized to drive down supply chain risk. As the usage of IT becomes ubiquitous within single organizations and supply networks, its pure strategic value diminishes and the risks it creates threaten to become more important than the advantages it provides. Therefore, protecting these systems without overspending now is of the greatest difficulty.

Advances in IT have enabled integration and information sharing, and thus become a key driver of supply chain collaboration. In fact, it has been argued that it is impossible to achieve an integrated supplychain without IT. Virtual collaboration and integration both base on a virtual sourcing which enables a relatively straightforward internet-based end-to-end supply chain solution that minimizes human intervention in the order fulfillment process. one of the keys to the successful management of these supply chains is integration, in particular, integration through the exchange of electronic informations. It is necessary that all required information can be transmitted electronically and that most employees are willing to use electronic form of communiation.

4.2. Achieving agility in the virtual supply chain

Agility of a suply chain is incresaingly important as a source of a renewable competitive advantage. The organizations should determine the need for and ability to develop agility in their supply chain. Delivering superior customer service in a world of uncertainty requires a responsive, agile supply chain that can adapt quickly to changes in market conditions.

Greater transparency in supply chain operations and more collaboration are becoming crucial for success. Web-based tools are facilitating the flexibility and extended reach necessary to allow organisations both to view deep into the supply chain to see how their suppliers are performing and to re-configure their supply chain as circumstances demand. By comparing costs associated with agile performance to the costs of failure to be agile organizations should be able to make a decission of whether or not is agility a useful strategy .[3]

Agility in suply chain can be contrasted with the concept of leanness. Lean supply chain gives better results in the environment with higher certainity and predictability, but it also can lead to a fragile supply chain and to an inability to respond quickly and flexibly to changes in the market. However, ability to build agile supply chain cannot be developed rapidly as wanted. Considering concepts of leanness and agility in the supply chain, the two paradigms could be compared first, and then analyzed the similarities and differences between them. The coclusion is that neither paradigm is better nor worse than the other, they should not be considered in a progression or in isolation. In some situations, they can be combined together to enable a total supply chain strategy, bringing together the advantages of both paradigms.

Conventional supply chain systems are unable to meet the demands of todays customers. For the most part, they can be described as slow, expensive, inaccurate, inconsistent and inflexible. Conversely, Internet-enabled supply chains are capable of delivering superior customer service in ways that conventional supply chains cannot. Agile, virtual supply chains have been able to generate seamless coalitions of partners, that permit them to change the rules of engagement in mature industries redraw traditional industry boundaries and invent whole new industries and marketplaces.

Organizing and maintaining a competent and flexible supply chain is a major challenge to manufacturers in today's increasingly competitive and uncertain environment. Virtual integration represents the substitution of ownership with partnership by integrating a set of suppliers through information technology for tighter supply-chain collaboration. From the systems and control perspectives, a role that virtual integration plays in facilitating manufacturers to achieve greater manufacturing flexibility and comparative cost advantage is significant. Environmental uncertainty tends to motivate manufacturers to increase their manufacturing flexibility, with both virtual integration and supplier responsiveness. The results demonstrate the importance of supplier responsiveness for manufacturers to gain manufacturing flexibility and comparative cost advantage in supply-chain operations. Environmental uncertainty, thus, might first appear as a threat to a manufacturer, but with the help of IT and more responsive suppliers, such a threat could be transformed into a competitive edge, as reflected in the manufacturer's higher levels of manufacturing flexibility and comparative cost advantage.

In global business competition, companies believe greater transparency in supply-chain operations and collaboration is very important for success. Transparency brings accountability and responsibility. This openness in the supply-chain brings opportunities, but also some evident threats, listed in the Table 2:

Table 2: Advantages and disadvantges of virtual supply chain model implementation [10 pp.11]

Advantages	Disadvantages
Focus on core competencies	Reliance on others for outsorced activities
Operating in a real-time	Greater dependence on suppliers and partners
Significant inventory reducing	Exposing weaknesses to customers and partners
Greater ability to forecast and adjust to changes	Orders fulfillment in the others hands
More accessible informations	Technological sophistication is required
Greater ability to track and be tracked	Necessarity of considerable investments

Across different sectors, the leading organizations realize supply chain optimization, advanced supply chain management, virtual logistics, e-commerce, digital communication systems, and other modern tools of supply chain are essential factors in getting to the high level of success. The key factors of successful supply chain management strategy are:

- strategic alliances, networking and relationship management with colaborating firms, clients and customers
- intenet-based informaton systems providing real time informations
- business process reegineering along the logistics value chain
- supply chain visibility in order to avoid misunderstanding
- performance measurement system including identification of key performance indicators[8]

3. CONCLUSION

If an organization tends to succeed, it must have a tightly integrated supply chain that is constantly monitored and improved and which must be supported by the advanced technological infrastructure.
The two worlds of physical and virtual suply chain are gradually blending into one. The processes of moving and storing products have become increasingly dependent on technology, and the technology has become dependent on the Internet. However, advances in technology have effects only if they are aplied in a real world. Effectiveness of integration physical and virtual worlds in large part depends on supply chain design. A well designed virtual supply chain caters to the needs of different customer segments and at the same time make organization able to compete in the market place through an efficient and effective supply chain. An important benefit of a virtual supply chain is its ability to decrease the time to market for a product, and also to increase profitability and reduce costs. By implementing an internet-based supply chain, organization can achieve enhanced visibility and trasparency across the supply chain and increased customer and supplier satisfaction.
Finally, a key issue in the success of virtual supply chains is the synchronization of operations among multiple suppliers by using information technologies, which, in the instance leads to productivity and responsiveness. This is achieved by focusing on higher quality interactions that use the most advanced resources.
Use of Internet-based technologies and digital communication across virtual supply chains is here to stay and will be a part of future business models. The key is in finding the right combination of technology and its application, which connects the elements of supply chain in order to achieve greater competitiveness.

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MANAGEMENT AND HUMAN RIGHTS

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Summary: In the modern management new technologies are widely implemented. It is difficult to imagine handling of information, including the personal information on employees without use of internet, corporate internet network, computers and other new, electronic means. Quantity of information overcomes capacities to handle them without us of those contemporary technological means. Decision making process, assessment of market and other inputs is impossible in old way. At the same time, use of those new technologies create a danger to be misused in abusing personal data or privacy of personnel as one of the key human rights, guarantied in a number of international sources. Solution of the problem is in creating of balance between need for use such technologies and responsible implementation of it. For that purpose an responsible, well educated management in human rights is a precondition.

Key word: new management technologies, human rights, privacy, Human rights education, Human rights implementation

1. INTRODUCTION

The end of the 20th century and the beginning of the 21st are the time of introducing and implementation of modern, new management technologies, based on an enormous development of the new, sophisticated technological means of information, as well as the modern means of communication.
In accordance with our topic – management skills – we will talk about one of the human rights, right on privacy, guarantied by several international declarations and conventions on human rights.
According to the Universal Declaration of Human Rights
″No one shall be subjected to arbitrary interference with his privacy, home or correspondence, nor to attacks upon his honor and reputation. Everyone has the right to the protection of the law against such interference or attacks″ [1] .
Also, Convention for the Protection of Human Rights and Fundamental Freedoms (European Convention of Human Rights) stated that:
1 Everyone has the right to respect for his private and family life, his home and his correspondence.
2 There shall no be interference by public authority with the exercise of this right except such as in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others″ [2] .
It is quite clear that privacy of persons is protected. However, problem is that there is no one clear, comprehensive and precise definition what the right of privacy is. It is understandable in theoretical, or verbal level. But, there is very difficult to define privacy in practical level, in concrete circumstances.
Protecting privacy, human rights are intended to prevent unauthorized influence interference in private life, in his family, home or his written communication. Also, everyone is protected against the attack on his honor and image.
However, it is more difficult to define what the right of privacy exactly means. What is concrete content of it? It seems that it is not even possible to determine the content of the right to privacy exactly.
Really, looking in the right of privacy deeper it is obviously clear that it is changeable and that the real content of the right of privacy depends form many factors; first of all from technological and scientific development, as N. Volcanic stated [3].

2. NEW TECHNOLOGIES – STRENGTH AND WEACKNESS OF MODERN MANAGEMENT

In the recent past it, for example, it was not necessary to collect the big quantity of personal data for employees. Data bases on employees consisted of only couple necessary fact: name, surname, expertise, date of birth and some other. And all of them were handled in pure mechanic way, in one office and by several officials.

Introducing ID number was the first step in the real revolution in handling of employee's data bases. ID number consists of a large number of data, speaking on the employee personality. Among the already mentioned data, the ID number has some others: home address, nationality, marriage status etc.

However, that was not enough. Request for efficient management asked for more and more data in the employee's data bases. Sometimes it is really difficult or even impossible to understand clear connection between the efficiency of management and the collecting employee's data. There exist strong impressions that, in some cases, it is not needed, but a kind of inertia leads management to collect more and more data.

Instead of better efficiency, collecting data without clear criteria leads to in-efficiency, because it is impossible to handle of them properly. It is well-known an absurdum; having the large number information, management hade no necessary information in decision making process.

Situation has been changed by introducing new technologies in the management, or so-called information means revolution. New technologies create possibility for handling extremely large number of information without serious problem, in a very short time. It put on management disposal capacity to analyze a large number of data when it needs it and to take the result of such analyses in mind.

The consequences of such development are extremely higher level of good decision making, easier collecting of all necessary information regarding the general needs of the market. The management can make more successful assessment for all imputes needed for god planning of production, market plans etc. The work which spent ours in the very close past now can be completed in couple minutes or even seconds. Of course, that improves efficiency of work, provides higher profits, accelerate flow of money. All of that is very attractive and very motivating for acceptance those technologies as a management tools. We are living in ″the IT dominated society″ [4] today.

It is impossible to imagine any serious governance of small or big enterprise without internet communications, without very comprehensive data bases containing a large quantity of different information, including information about employees.

However, that idyllic picture, as usual, has another side as well. That another side is reflected in the relation between application new thenologies in management and respect of human rights. Let to remind that human rights are the result of century-s development and fighting for providing them. Today, human rights law and its implementation is a measure for civilization of a society, proof of its capacity to be a part of international community and to be respected full member of that community.

In the recent past, it was impossible to have some personal data without seeing official data base directly, in the office in which that data have been stored, for example. In such circumstances opportunities for misuse collected data existed, but it was on much lower level. One should have approach to the collected data to use, or to misuse, them.

Electronic, internet communication, handling personal, and other, data by use of computers and other electronic sources give much more opportunity for doing so. Just several more recent events have clearly shown the danger and seriousness of such possibilities.

Very smoothly, media reported last year (2008) about loosing the data base of a large number of banking accounts of the clients in United Kingdom. Also, last year public has been informed about loosing several millions of personal data of users of German Health Insurance.

It is interesting that in both cases that was only short media news; without explanation and without any information what's happened after that. It could be understood, to avoid undermine the public confidence in those public services. It is the intention of short consideration on the problems to do so neither. Those are only two of many other cases, reported through media, trying to identify and to mark the problem.

Definitely the problem exists. Use of modern, internet and other electronic technologies in management may result in the abuse of on fundamental human rights: right to privacy. However, that does not mean we can, or we should abandon those technologies. It is impossible in modern business and in the management in business. It could not be return to old method of management and old technologies. Solution is: to make the balance between the successful management using the modern technologies and protection of human privacy.

The problem is also seen in the Council of Europe, which clearly stated that the European Convention of Human Rights has been affected by the spread of communication technologies and the dominance of the internet [4]. The Council in its Political Statement underlines the duties of government officials to spread new technologies without infringing on civil rights and liberties.

It is important that the Council calls for governments to restrain themselves in the desire to use technologies ″to track and monitor″ privacy and ″to ensure business do likewise″ [4].

This is very important part of statement from the management point of view. The wording of this part of statement is very clear: a government has a primary responsibility, but that responsibility implies its duty to provide respect of this by the business (read: management).
It is not very easy task for management. There is not small number of people which are pessimistic in that sense. They have strong and based argument for such pessimism.
One of the group of thinking confront the right to the privacy to some other legal concept; e.g. to the right of security. This group put the question do we have a right to it at work? The answer is, that there is no way to provide security n a non-invasive way, it wills always impact privacy [5].
This dilemma seems to be too artificial and approach of those people to the understanding of the right to privacy is too idealistic. Namely, all Human Rights document know the exceptions of respecting that right. One of the clear exceptions security reason, what is the case. It is not possible to criticize such exception. It is possible to criticize the misuse of it; broader understanding of it unjustified by real need for security, what can be case. The problem is to establish clear and precise balance between too.
The god example of well understanding the relation between security and privacy is given by Ben Halpert in Information Security Magazine. He stated that ″Security and privacy teams must work together to protect personal information in the digital age″ [6].
The approach of Ben Halpert is very realistic one. He is very aware there is no absolute privacy on the internet, corporate internet, telecommunications network or computing devices. ″There lack of privacy in our everyday lives is an undeniable truth″ [6]. But, that does not mean we should give up of trying to protect our privacy. Ben Halpert insists on joint work within in organization in addressing the lack of online privacy. He clearly advocates stronger control of personally identifiable information of employees (and customers) in three levels: when it stored, processed and transmitted. Management has to have in mind possible illegal activities which can undermine security of personal data and such activities must be avoided [6].
From all quoted thinking about problem it seems that the problem is even bigger and more serious than in the first sight. That is truth. However, solution is not in any way to stop the use of technology in management. The advantages of the application the modern technology in the management have no alternative in modern business. It is not real even imagine functioning of any modern management without use of such new technologies.
What is solution then?
Solution is in making balance between risk of misuse of new technologies and their proper and responsible use in the management. However, there are some preconditions for providing such approach. It must be theoretically prepared, by increasing of knowledge new technologies, identifying their weaknesses and sensitive point, creating precise procedure, cooperation with the experts in preventing of their misuse.
It is valid to remark there is no much discussion about those problems neither in our theory nor practice. At the same time, in foreign media and expert publications there is going very alive and broader discussion. That not obviously mean such discussion is very deep; there is no many serious, scientific publications and analyses of the problem [7]. However it is very important pure fact that’s happening. There are a large number of public discussions through internet in which participate different people, mostly with good knowledge of modern technologies, suggesting possible solution.
To public discussion on relation between Business and Human Rights extremely contributed, and accelerated it, launching of the Campaign, opened by Professor John Ruggie, the UN Special Representative on Business and Human Rights. Campaigned was opened on December 2008, marking the 60th anniversary of the signing of the Universal Declaration of Human Rights. The states received the start of the Campaign very well, but more important is the conclusion on extending the mandate of Professor Ruggie until 2011. Human Rights Council called him to provide concrete guidance and make recommendations on the respective human rights responsibilities of both states and companies [8].
Professor Ruggie declared 2008 framework, which make clear that, among governments, companies also have responsibility to respect human rights. He asked companies to adopt a human rights policy, to undertake human rights assessment and to act upon it, to integrate human rights policy throughout the company and to track human rights performance [8].
In accordance with the above mentioned is the effort of International Business Leaders Forum, one international non-profit organization, which helps in a creating a sustainable business and cooperate with more then 100 business units around the world. The International Business Leaders Forum well understood importance of respecting human rights in the contemporary world and it is actively involved in that field. In fact, the Forum advocated necessity of respecting human rights, quoting very well based argument for that [8]. Company can:

1. Safeguard reputation and brand image
2. Gain competitive advantage
3. Improve recruitment, retention and staff loyalty
4. Foster greater productivity
5. Secure and maintain a license to operate
6. Reduce cost burdens

7. Ensure active stakeholder engagement
8. Meet investor expectations.

To facilitate the work of companies in the field of human rights, International Business Leaders Forum prepared and the International Finance Corporation, in cooperation with the UN Global Compact prepared a useful Guide, as a tool for company's managers to identify, assess and implement responses to human rights challenges [8].

The Guide has been prepared in rather practical way. It contains eight steps necessary for providing full implementation all measures needed for protection human rights.

First step should be determination whether an assessment of full human rights impact is needed.

The level of assessment, of course, depend from many factors: information on disposal to management, the nature of that information, information handling capacities, openness of company to outside surrounding, cooperation of company, use of new management technologies.

Next, second step, is identifying and clarifying context the business project of a company. That means evaluation of mutual impact of company business and human rights, especially already mentioned right of privacy. What is probability the privacy would be harmed, as well as some other human rights.

Third step asks for consider a company in local conditions and picture. What is possible impact of surrounding on the company relation to human rights: negative or positive? What are the possibilities for harming human rights in such surroundings?

The step number four is consultation with the stakeholders in verifying the challenges of human rights. Above mentioned stakeholders could be all people with the expertise in the field of assessment of human rights, especially on possible bad influences on respect of human rights.

The fifth step implies assessment of possible impact of human rights and consequences of that impact on company business and its image. Also, this assessment should include a company's capacities to implement human rights.

The step six is presentation of findings collected during the assessment process and recommendations to management on further measures needed to be introduced and implemented.

The seventh step implies full implementation of a human rights management process.

The eighth step implies continued monitoring, evaluation and reporting on the managing process.

It is valued to notice that above Guide has been designed for any business sector, regardless of its size, nature or other possible criteria.

It is real pity there is no such discussion in our public; especially there is no voice from the scientific community, which avoidable must be involved in finding solution. The lack of discussion could be understood as the low priority of the problem in our, transition country. That can not be serious reason for that. We are on the way to European Community. That means we are expected to approve all European standards and rules, among others, in business as well. That further means there is not possible to expect serious economic cooperation without full implementation of those standards, including the standard in respecting of human rights.

This small intervention is one attempt to provoke such discussion. Definitely, it is high time to start with consideration of the problems which we will be forced to solve in very near future. It is recommendable to use all experiences already existing and collected during the discussion in around the world. However, for useful results of future discussion some preconditions have to be fulfilled.

One of them is full understanding that respect for human rights should and must be integrated in management processes. One of the important skills of management ought to be management of human rights. As have been already mentioned, there are many arguments for such requested, which can be summarizing as the request for company to sustain and improve its image in the society and company business result.

That obviously asks for education of management in the human rights. Management is expected to know what human rights are, what the procedures in their implementation are. Respect of human rights decisively contributes to seeing the company as community responsible. On the other side, respect of human rights of employees creates loyalty of them towards company, seeing it like their own. Finally, lack of respect or even the harm of human rights can provoke legal responsibility manager and company as well. That could seriously undermine public confidence and its image in the public.

Education should be organized and planned. It has to consist of gaining basic knowledge of human rights, but also better knowledge on modern new management technologies. Good skills in use of new management technologies and tools, especially those which potentially can contribute to unintentional abuse of human rights are of essential importance. Knowledge of possible weak points of internet, or corporate internet, computer communication and other technological means should help to user to avoid those points. Also, clear establishing and full implementation of established procedure for use modern equipment obviously diminish possibility for harming privacy and other human rights.

The role of educational institutions (faculties, higher schools, institutes etc.) is crucial. We should be prepared for a leading role in that field. We are expected to prepare curricula's for studding those skills in our institutions, but also we should be ready to prepare special programs for improving already graduated people. Of course, the

educational institutions should play leading role in advocating the need for creating skills for management of human rights and responsibility of companies in that sense.
Such education, of course, has to emphasize all advantages of the use of modern new technologies in contemporary management. There is no other alternative. New technologies are expected to be further developed. Such development is great contributes to general social development. Having in mind all possible problems, already mentioned, the advantages of use new technology is un-avoidable in modern business. The business must accept all risks of its use trying to eliminate the risk as much as possible. Probably, it final goal, complete elimination could not be reached at all, but that's ideal. All managers have to have in mind that ″technology is neutral″ Technology isn't problem, but the way people use technology is a problem [5].
In such understanding of the problem, new management technology can be used for enhanced of privacy, but must be understood that it is more expensive to build services that protect privacy than to destroy it. But we must paid that price, in the interest of protect human rights.

3. CONCLUSION

Introducing and implementation of modern, new management technologies, based on development of the new modern technological means of information and communication have a great impact on human rights, guarantied by, first of all Universal Declaration of Human Rights, European Convention of Human Rights and other sources of human rights law.
One of the most sensitive filed of human rights is right of people to the privacy. That is general right, without clear content. It must be understood as a developing rule, which should be interpreted in accordance with the technological and scientific development.
New technologies bring new requests for respect that general rule. Those technologies provide possibility for collecting and handling much more personal data then before ″information revolution″. By it, such large number of collected data obviously has brought more possibilities for misuse those data and abuse the right of privacy.
Unfortunately, that danger is not possible absolutely decline. Also, it is not possible because of such danger to abandon use of developed technological management means. This conclusion leads to making appropriate measures for the use of new management technologies in proper way and to diminish possibility of misuse it for harming human rights, especially right to the privacy.
Those request put new challenges in front of management. Management has to be aware of its own responsibility for respect human rights. To be responsible, management has to reach capacities for managing human rights as well. Management should has in mind that, by itself, new technologies are neutral regarding human rights. However, management is expected to understand that proper implementation of the new technologies could contribute to respect of human rights; also, the new technologies could be misuse to harm them.
Having in minded all of that, education of management for implantation of the new technologies is needed und urgent. That education should make the management capable to manage and human rights as well.
The companies must understand that god manage of human rights position them in better way in the community, provide them image of society responsible company, and provide the better image of the company. All those are the reason to for company to accept in the most appropriate way their responsibility and, in some cases, additional expenses for playing such role.

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DEPRIVATION OF WORK CAPABILITY IN POSITIVE LAW OF BOSNIA AND HERZEOVINA DE LEGE LATA I DE LEGE FERENDA

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Summary: *In Bosnia and Herzegovina entity laws regulated deprivation of work capability .In The Republic Serbska a public discussion on Law draft concerning extrajudicial procedure is in progress. [1] This paper will show material and legal laws which are applied in Bosnia and Herzegovina for deprivation of work capability of people and actions which regulate acting in cases when a person of age is totally or partially deprived of work capability. In actions for depriving of work capability a guardian organ, which assigns a guardian to such a person, and court which brings a decision in extrajudicial procedure. In Bosnia and Herzegovina entities deprivation of work capability is regulated but family law and extrajudicial law. People who are deprived of work capability are not protected adequately because of the prolonged time to appoint a regular guardian. Shortcomings that exist in positive law are not changed in RS draft Law.*

Key words: *work capability, of age, extrajudicial, guardian, court, protégée*

1. INTRODUCTION

Work capability is the ability to achieve by your own willing statements rights and obligations and to undertake legal work. Work capability according to the rules of Family law of the RS, Family Law of BH and years of live or entering a marriage with Family law of Brcko district BH, is achieved by reaching 16 years of age when the curt allows it. The court to persons who are 16 years of age allows entering a marriage if they are physically and psychologically ready to conclude a marriage. If the person is divorced from such a marriage he or she still has complete work capability. Parenthood can be the basis for achieving work capability before 18 years of age, according to Family Law of BH.[2].

2. REASONS FOR DEPRIVING OF WORK CAPABILITY

In BH, Laws of RS, BH Federation and Brcko District BH, a special protection is offered for those who are not able to take care of themselves, their assets and interests. It is a result of many different reasons. Grown up persons are business incapable because special, additional circumstances because of which their ability to individually take part in legal business. When they are underage persons without parental care they are placed under supervision because of immaturity, and with grown-ups their health state is in question with physical or psychosocial diseases. To place a grown-up under guardian supervision a previous decision is needed upon that matter by the court of law on depriving that person of work capability. When the court in extrajudicial procedure brings a decision that a grown-up person is deprived of work capability then based upon that decision he is appointed a guardian by a court guardian organ. Basic reasons for work capability deprivation are the facts that grown-up person is not capable to take care of its rights and interests because of complete or partial inability to judge and decide, as it is stated in the article 29. Law of Extrajudicial procedure SRBH is currently in power in

[1] By Conclusion of People Assembly of RS no. 01-2010/08 dated 16.12.2008. this lawdraft is placed for public discussion lasting 60 days
[2] The Aticle 157 pararaph 3 PZFBiH

RS, with changes and supplements.[3] There is identical rule in the article 27. Law on extrajudicial procedure Brcko District, as well as the rule, article 29, Law on extrajudicial procedure BH Federation. It is interesting that the procedure for depraving and giving back work capability is regulated in Family Law of BH Federation in rules of the article 325 to 329. Considering the fact that family law is lex specialis in comparison to extrajudicial procedure law rules of Family law in procedure should be applied for depriving of work capability. In RS Law draft this rule is identical to the one in power.[4]
The article 192. BH Federation Family Law and the article 173. Brcko District BH Family Law, state reasons that may lead to work capability deprivation of a grown-up person. Those are mental illnesses, psychological disorders, alcoholism and drug abuse and senility. Laws allow other reasons leading to inability of a grown-up to take care of his rights and interests. The court is given possibility to asses in each individual case which reasons may lead to the situation, to be able to conclude that because of which a grown-up person is not capable of taking care of its rights and interests. Apart from the above stated that could be a hard physical disease of a person. Even though no law mentions one of the oldest law institutions, wastefulness, it would not present a problem to include it under other causes, when a person wastes its assets by its deeds irrationally, by which he endangers his own existence, and existence of people he is expected to support. If there is such a rule in the article 370. of the Suisse public legal code[5] we think that there shouldn’t be an obstacle to accept wastefulness under other terms.
Mental illness will be the reason for complete deprivation of work compatibility in cases when a person is not capable to take care of himself personally and to protect his rights and interests. It needs a harder form of mental illness which needs to inability to judge. If a mental disease is not of such an intensity, so judged by the court, a person can take care of the most of his rights and interests, and by single actions only endangers his and interests of others, then the court will limit, partially deprive work capability. RS Family Law and BH Family Law, as well as Brcko District Family Law are in accordance that it should be direct endangerment of his rights and interests and other person interests, which means that the person is capable to take care of most of its rights and interests.
Challenged Mental Development is for many reasons suitable for exact decision of the intelligence left over. There are four groups of mental challenges, and the first group with easily mentally challenged people may not even have partially limited work capability, the second group with moderately mentally challenged, with IQ between 35 and 50, might have only limited work capability, while with hard mental challenges with IQ between 21-35, and mentally challenged people with IQ less than 20 should completely be deprived of work capability.
Alcohol abuse is mostly the reason for partial deprivation of work capability.FBH Family Law and Brcko Distinct Family Law do not consider all the people who enjoy alcohol to alcoholics, but state that for that an over abuse of alcohol is needed, to be able to deprive persons’ work ability or limit it. Thus, objective condition is an over abuse of alcohol which is not instantaneous but permanent, and as an alternative a subjective condition is stated that the person cannot take care of its rights and interests. If the person endangers his interests then he will be deprived of work capability.
Drug abuse and over abuse is a reason for work capability deprivation but it can also be the reason for limited work capability deprivation. It depends on the level a person can while on drugs endanger himself and people around, to endanger his rights and interests, as well as of the others for those persons are in constant conflict with reality. We consider that employer policy was not work capability deprivation in cases of drug abuse but to deprive such persons of business capability in any case when such persons endanger their rights and interests as well as rights and interests of others because of the drug abuse at any extent.
Senility is one of the possible, Law regulated causes for work deprivation and limitation. The term senility implies a number of psychophysical characteristics and changes specific for the old age.
Hard physical disease may lead to enabling a person to take care of his rights and interests. Persons who have had a stroke and are not able to move their limbs may be deprived of work capability.

Work capability deprivation procedure
The procedure consists of two phases. The procedure to deprive a person of work capability and a procedure of placing the person under guardian supervision. For work capability deprivation basic court is in charge. The procedure is started in two ways: it can be started by the court itself by its official duty, as predicted by a rule, article 326, Federation BH Family Law, article 30. Law on Extrajudicial Procedure RS, article 28. Paragraph 2. Law on Extrajudicial Procedure of Brcko District, and thus was stated in Law of Extrajudicial Procedure of BH Federation. The other way to start a procedure is if some persons propose it. The proposition can be made by a guardian organ, a spouse of a person to be deprived of work capability, his blood relatives in the first line, both ascending and descending line, and relatives in the second line as stated in the article 326. of Federation BH

[3] Published in Official Register of RS no. 74/05
[4] Article 28 Draft
[5] Schweizerisches Zivilgesetzbuch , pg.87, Bern 1985.

Family Law. According to that Law brothers and sisters, of the same parents or of one mutual parent, the only from the cousins in the flank line that can propose to start the procedure to deprive a person of work capability, whether they live under the same roof or not, with a person under the process of deprivation. Differently from this Law regulation, article 30. Law on Extrajudicial Procedure of RS, and article 28. Law on Extrajudicial Procedure of Brcko District BH persons that can propose the procedure of work deprivation are limited and defined. Those are children and parents, and for other relatives, grandparents, siblings only if they permanently live at the same household with the person to be deprived of work ability. Federation BH Family Law. does not predict the possibility that other people should start the procedure of work capability deprivation even if they permanently live with a person to be deprived of work capability. But Law on Extrajudicial procedure RS and Law on Extrajudicial Procedure Brcko District BH predict that other persons can propose the work deprivation procedure if they permanently live at the same household with the person to be deprived. There is a legal possibility for a person to be deprived of work possibility to propose the procedure himself, if he can understand the importance and legal consequences of the proposition. This regulation according to Federation BH Family Law and this possibility is allowed to the person that has previously been deprived of work capability and he now suggests it to be given back. Law on Extrajudicial Procedure RS and Brcko District predicts the possibility that other persons can propose the procedure if it is predicted by Law.

Guardian is in any case, by all the laws, entitled proposer for work capability deprivation. Public persecutor may start a procedure by Law on Extrajudicial Procedure RS and Law of Brcko District, while Family Law of BH Federation a public persecutor cannot do that, and article 30 of the Extrajudicial Procedure Law of BH Federation predicted the possibility that a persecutor can propose a decision. For deciding upon the suggestion to deprive a person of work capability the local court is in charge, of the lodging place of a person put under guardianship. Before that it is important to see where the person was living before he was eventually placed into health institution.

The preposition is applied to the court in charge and the court is obliged to inform the service in charge for business of keeping Official registers in which the person in question to be deprived of work capability is registered, for purposes of enlisting the procedure, immediately after the preposition is received. The court has the same obligation to property register bookkeeping office where the properties in question are placed, owned by a person to be work capability deprived, to register starting the procedure.

The court schedules meeting in court. For the meeting the court is obliged to invite a proposer, a guardian of a person to be deprived of work capability, or his temporary representation and guardian organ, and a person under the process of deprivation only if capable, so judged by the court, to understand the importance and legal consequences of his taking part in the process. Temporary guardian represents in extrajudicial procedure a person for whom a work capability deprivation procedure is started. Differently from permanent guardian, temporary guardian authorizations are limited. For temporary guardianship regulations of Family Law are applied, dealing with guardianship over 15 year olds, and guardian organ can if necessary, broaden regulations on guardianship to persons less than 15 years of age (article 212. paragraph 2. RS Family Law), while BH Federation Family Law lowers the boundary to 14 years of age. Temporary guardian duty stops when permanent guardian is assigned or when a court decision is made in effect that there are no reasons for work capability deprivation. All the laws allow to the court that if the person to be work capability deprived is placed in a health institution, to keeps the court meeting in that institution. That means that the meeting can be attended by the proposer. During the procedure the court must hear the testimony of a medical expert in the field. He must provide medical findings and opinion about the state of the person and his ability to understand. The judge is obliged to attend the procedure of unless the procedure is not performed in a health institution. This regulation is kept by the Law Draft which is not a good solution. The judge is the one to be above expert opinions and thus all the abuses of expert opinions without the judge present can be avoided.[6]

Federation BH Family Law looks for an expert report in written form, while other Laws do not require that, but the court practice formed asks the expert to do a written report and opinion. The court has the possibility to prolong the decision bringing about work capability deprivation due to alcohol and drug abuse if there is a reason to believe that a person will prevent himself from abusing alcohol and drugs. This is the judge's decision in each specific case. In any case the court should prolong decision making on limiting work capability from these reasons if a person decides or is made by court to go to a rehabilitation programme in a health institution. It is interesting that FBH Family Law has not the imperative order to the court to prolong decision bringing upon work capability deprivation but only gives the possibility and not an order to the court to prolong the decision bringing. On prolonging decision making upon work capability deprivation the court decides with a resolution. It can be prolonged to a period from 6 to 12 months. Unless the person to be deprived avoids treatment during this period this resolution is recalled.

When the court decides that all the conditions have been met to deprive the person of work capability or to limit it, the resolution will be sent to the proposer, the work capability deprived person, his guardian and guardian

[6] Article 35 Draft

organ. Appeal term against the resolution of work capability deprivation is 3 days after the resolution has been received. FBH Family law has a contradictory regulation concerning court obligations to deliver the resolution to the work capability deprived person, so in article 335, paragraph 2, it is said that the court needn't deliver the resolution to the person who cannot understand the importance and legal consequences of the decision, or in case that it can endanger his health condition, while article 337, paragraph 2 , gives the possibility to the person to appeal regardless his health condition, to appeal during 3 days since the resolution has been received. Court of original jurisdiction is obliged to deliver the appeal to a higher court, which is obliged to bring a decision during 3 days since the appeal has been received according, to the article 337. FBH Family Law the deadline is prolonged to 15 days since the day of appeal reception. Court is obliged to deliver the resolution work capability to the official register organ to enter it in the Official register of born people and property bookkeeping court. The resolution on limiting or depriving of work capability the court must deliver to the official guardian organ without delay, which must place the deprived person under the guardianship, during 30 days since the resolution has been received.

Guardian organ and guardian duties

The procedure of placing under guardianship itself and deciding upon the guardian is the same as the procedure of placing an underage person under guardianship, concerning choosing the guardian, checking his capability and propriety, asking relatives to undertake the duty, so in the procedure of receiving guardian duty and all other actions concerning the reception.

The guardian of a person deprived of or with limited work capability is obliged to take care of the person, first of all taking care of the reasons the deprivation or limitation took place and try to remove the reasons and prepare the person for individual labour. RS Family Law gives the possibility to guardian organ to define the jobs the person with work capability limitation may individually perform. BH Family Law states the jobs a protégée with limited capability can perform. Those are the jobs by help of which he can regain the right, unless the Law specifies differently, and can by himself give statements concerning his personal conditions, unless differently specified by Law or by a Guardian organ. For all legal business where he manages assets he needs guardian agreement.

Guardian organ has double obligations and tasks. He oversees individually the health condition and success of guardian protection over the protégée and does an oversight of the guardian.

Guardianship cessation over persons deprived of work capability

Guardianship over people deprived of work capability ceases legally by regaining work capability, the procedure of which is lead extra judiciously and goes under the regulations on work capability deprivation. It means that the preposition to the court can be made by all the people and organs in charge to start a procedure of work capability deprivation. The court can decide to partially limit work capability for a person who was totally work capability deprived if the person is partially ready to take care of himself and his rights and interests. The court is obliged to deliver the resolution of regained work capability immediately to the Guardian organ. In such a case the Guardian organ must immediately bring a decision of guardianship cessation and releasing the guardian of duty.

The guardian must give a report on his work and assets of the protégée at the moment of guardianship cessation.

Guardianship stops in case of natural death of a protégée, as in such a case there is not a subject to the right. The same effect as legal death has a proclamation that the person is dead.

3. CONCLUSION

The procedure for deprivation and regaining of work capability is an urgent matter. Regulations on deprivation and regaining capability can be found in Family Laws of RS, FBH and Laws on Extrajudicial procedure. Indecisiveness about whether this action for depraving of work capability will be done by regulations of Extrajudicial procedure or by Family Law regulations can be seen in Family Law FBH, which in article 312 states that extrajudicial procedure should be performed by regulations of extrajudicial procedure if Family law does not state differently. As the procedure of work capability deprivation is performed at court and finishes by appointing a guardian by Guardian organ, it lasts very long disregarding legal deadlines. Starting from the fact that the Guardian organ leads the procedure according to General Law, and the court by regulations of extrajudicial procedure and Family Law, we consider that the reform of positive law should be done seriously in each entity, in procedures of work capability deprivation and guardian appointing to such a person. The court should be the one to appoint the permanent guardian immediately after the procedure at Guardian organ preposition. The suggestion should be supplied by the Guardian organ directly at the court meeting which is assembled to decide upon work deprivation.

Draft of law on extrajudicial procedures of RS is being publicly discussed for a few days more. This is the opportunity to solve such a serious problem, so that the court can appoint a permanent guardian at the preposition of a Guardian organ.

A complete Law reform regulating the problem of work capability deprivation and limitation is necessary. The judge dealing with these procedures should be specialized and in most cases not depend on medical experts only but be specially trained. The same case should be with people employed with Guardian organ and have specific information from their colleagues.

Bearing in mind regulations of each entity in BH and already made structure of this institution in practice we consider that the suggested solution is the most acceptable and that the Law Draft on Extrajudicial procedure should be regulated as suggested by work capability depriving process. The possibility to deprive somebody of work capability without existing conditions for other interests as mostly material are must be avoided.

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GRAINS OF TRUTH AND CHANCES OF NETWORK MARKETING

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Summary: *Mostly it is known that the marketing, and its framework, marketing concept of a modern philosophy of technology management and corporate organizations. This concept has gained importance in the 80's of the last century and has not lost its importance, but what is even contrary, more updated since the offer of goods and services remains the radical increases and improves, so the large number of business organizations, the largest problem of placement of products and services. It is clear that companies that problem may be solved by only constant quality research needs, desires and interests of customers and consumers so that they produced, and as the products that the market search and can absorb. In modern conditions is communicating with the market (integrated marketing-logistic activities) became the basis of the success of each organization, but also a condition of survival, growth and development companies. Communicating with the market can be realized in different ways. One of the very successful technology and technology of the communications network is technology marketing. It in a very specific way that combines marketing - logistics activities by the organization directly communicate with potential buyers on the principles and within the network on his own, unique way of linking partners (producers and consumers) through a common interest as the most significant tissue cohesion each joint work. While in most developed countries of the world network marketing really takes all the more increased because of a number of advantages that time on, not unlike the concept of marketing, is not received, nor about the importance of the transition countries, where almost even officially there is no right of citizenship. Network marketing is a way of marketing the goods and services, but at the same time a great business opportunity in particular for countries in transition where the unemployment problem number 1. It is necessary to know the significance of multiple marketing networks, its structure and functioning, and it as soon as the function and take advantage of the opportunities that it provides indisputable.*

Keywords: *network marketing, multi-level marketing (MLM), networked member, sales promoter, sponsor ,road of success, pyramid of success*

1. DETERMINATION OF NETWORK MARKETING

Long have past the last time when the demand was greater than supply, so the market is not needed to address special attention because all that was offered was paced on market. Defining stricter problems qualifying for goods and services imposed requirements that the central event of all and put his majesty CUSTOMER. Buyer, (his wishes, needs and interests) is a central axis around which turn all management activities, and therefore corporate organizations continuously and persistently searching for new ways to communicate and to introduce potential customers about products and services they offer.

Network marketing is a new and specific way of marketing the goods and services that the successful functioning and increasingly is expanding for several decades. It is essentially an entirely new approach to the laws of free markets and globalization, is a different way and most aggressive placement of goods and services, so it is often called the marketing distribution systems 21st century. Network marketing system becomes more widespread and all relevant everywhere in the world. One of the fastest growing forms of sales and distribution in the world.

Network marketing has emerged as a competitor selling classical manner with the basic trends and essential characteristics that maximize numerous intermediaries between producers and consumers since it is their existence inevitably caused embed various brokerage service in the price of the product for the end user which surely is not favorable nor manufacturer or end-customer - consumer.

System of network marketing is a manufacturer of consumer and approaching time and price of products or services is becoming more favorable (to the mutual satisfaction - an important common interest), and this is one of the most important advantages of online marketing compared to other methods and systems sales.

Consumer marketing in the network gets the opportunity to supply products under preferential prices, which in practice called club, core, distribution or user. This can hardly call the direct purchase or without an agent (but not direct sales - but this will be a speech later). The goal of network-marketing distribution is in the best buy insurance in the broadest sense of the word (for the cost, quality products, the manner of purchase, the possibility of obtaining a bonus for any personal involvement to recommend - the promotion of products and possible participation in the percentage of earnings).
And today (despite the existence of four decades), there are even a very different understanding of this already extensive activities both in volume of traffic of goods and services as well as the number of consumers and active participants sale - networked collaborators on joint work.
While in the classical mode of sale by merchants all day diligently working in the retail facilities for agreed wage (disproportionately participating in profits the company) so far in MM in a large number of people by doing a little work by reducing costs, time and work on the sale and at the same time they are given the participation in profits relatively firm in their recruiting realization product placements, in accordance with the system of remuneration and progression in MM firms. For this purpose MM each company has its own marketing plan (plan careers simulative levels) and compensation plan, or the levels of progress and the system of distribution of profit. Development of computer technology has enabled MM companies quickly, easily and accurately monitors the traffic of goods, activities, vendors, and the calculation of the actual impact of earnings promoter's placements goods.
MLM companies do not have high costs, which in many segments of burdening classic business and built into the price of the product that pays the ultimate customer - the consumer. Savings are: the need for possession of a large number of commercial and retail facilities, in a large number of employees, the managers who ensure the execution of work, advertising campaigns, transportation to consumers, attractive and luxurious packing (MLM-companies did not aim to attract consumer packaging, but what is in it so often use cheaper and more packaging, etc.). The MLM-in almost all marketing-logistics tasks performed registered customers - distributors and promoters of product placements: promoting, selling and if necessary transported products through mutual communication and personal contacts.
Very simple and picturesque - a flow chart that showed Peter Clothier road block diagrams of consumer products in the traditional (classical) marketing (block-diagram on figure 1) and multilevel - MM marketing (flow-chart on figure 2) [18].

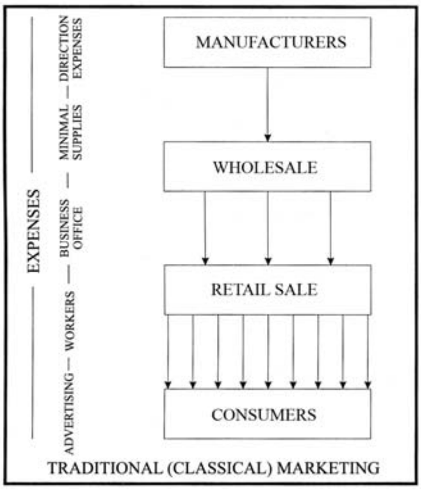


Figure 1: Block diagram of traditional marketing

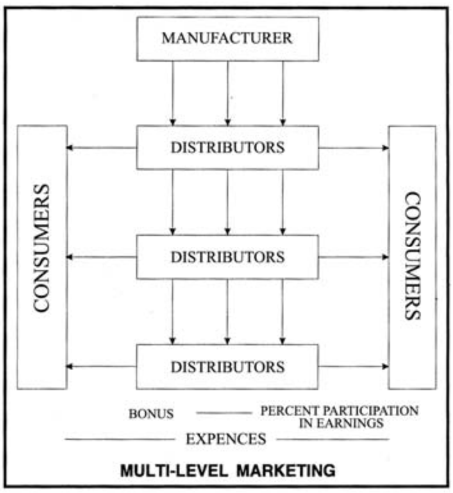


Figure 2: Block diagram of multi-level marketing

Different structure and reduce the cost of a large marketing-logistics activities by using the network in MM-in gets a free cost space, and so acquired funds is directed towards the consumer, ie de facto provides the opportunity and improve the quality of products and optimize product prices (ensures a higher sales - a more favorable purchase), and also opens the possibility of awarding promoters selling and buying at the same time affordable. This really closes the circle very desirable mutual usefulness and for producers and consumers. Such situations is favorable for both, and others, and therefore are actually together in a network that provides them mentioned mutual benefits - interests are linked to joint work (everyone from his aspect, the needs and interests).

The companies that work under the system of MLM is much more invested in the quality and development of its products, and due to direct contact with consumers and can very quickly respond to requests and needs of consumers. MM is definitely one of the most available roads for inventors, innovators and producers who do not want others to let commissioning traffic your new product.
It is certain that there are many kinds of goods and services, and products suitable for putting into circulation over the MLM system. There is no doubt that most products are great for this type of sale. It certainly must be products that are, if possible, all necessary because, otherwise the chances of finding customers in the personal environment was from the outset limited. It is important to emphasize that this must be the products or services for which there is a need to be a buyer or counseled that his goods to be explained - the goods must be something special. It is clear that this certainly is not and can not be too simple products for which there is very little that is said not to have products that are by their properties easily replaceable and - for such it should not be a consultant who would explain anything.
Ideally it is consumable products that are over and over buy and thus create permanent customers - consumers of these products. It is clear that products in the MM system should provide great results to all involved executors at various levels had satisfactory and attractive prizes.
We can briefly summarize the true basis for the development of an MM organizations make consuming goods of higher quality, they need each family or individual, and help us have a competitive, popular prices. High quality is crucial for the services that are offered by this system. MLM companies are doing their best to come out to meet the demands of the market and ensure that the goods or services that consumers want the most because "On the free TV market can be only one that offers consumers the best and the evaluation by the consumer" (John Hospers).
Of course you always have and those companies that are trying to create through MLM good job with poor quality products. However, the practice has shown that such companies have no long-term success, and the customers - consumers is that they possibly already at the beginning to recognize.
The idea of network marketing is based on the fact that some users are satisfied with the goods or services have even a natural need to express their experience in direct, personal contact with other persons .On such consumers are actually many companies carry out a de facto free advertising, but in network marketing it rewards - paid. MLM - the company used this phenomenon, and directed him to the expansion of the network of registered customers, but since this will benefit companies and consumers themselves. MM - a company marketing its plan allow consumers to come to saved part of the money that would otherwise be spent in the classical mode of sale.
MM-companies is the main task of finding the one segment of the population that is interested in buying, or to use certain products or services that are placed on the market. Result fully depends on the success of sales promoters of expanding the network of registered customers, and just because a product or service must be able to "impose" quality first of all, but at the same time and affordable prices.
Good knowledge of network-marketing business Don Failla notes: "The best way of selling in the MLM-in is that you do not sell * *. If there is an idea of the best sales, it is MLM idea. "
And although the network marketing have a very strong pace of development it is still in the marketing literature insufficiently researched and remained on the margins of marketing science to the present day. Today, the worldwide network or multilevel marketing companies from dealing with the family to the type of large transnational organizations and multinational corporate type. There are hundreds of thousands, and many of them earn huge revenues and earnings, exceed national borders and successfully overcome all the barriers and connect people across the earth through interest as the most significant tissue cohesion each joint work.

2. IMPORTANT CHARACTERISTICS OF NETWORK MARKETING

Primarily because the number of illegal, pyramid-shaped chain and distribution systems are trying to present as MLM programs, and today there are, unfortunately, many of the errors and misunderstandings about network marketing. The entire problem is that many do not know how to recognize or better said, differ from one another (good from evil).
The essential features of network marketing are that:
-Is negligible low price fee (entering the system),
- A contract with the Regulations of the company and the network members - customers and sales promoters,
- Does not exist any obligation nor the time or in another sense, the fulfillment of any obligation,
- All make the adequate efforts made and results achieved according to all applicable rules set forth,
- Earnings are regularly paid - the result of the purchase of products made,
- To the top not only can get all but the company sponsoring that continually helps each member (to her and the goal)
- Not only possible, but it is very often the case that the earnings of those "down" (later učlanjenih) are greater than the earnings of those who belong to them, ie, profits depend solely on the results achieved in the work,

- By no means is not necessary, nor is ever provided detour from door to door with a view to selling,
- For achieving a profit and success is not a necessity or need for any sale has already been enough recommend products and networking of interested consumers,
- A quality education with the work - for work and life, not only raising the level of knowledge required for MM,
- Provides a constant and continuous concrete assistance in the work of the sponsors,
- Work is carried out in communion - teamwork without coercion, in friendship and cooperation of participants in the network with a lot of synergy and cheerful mood,
- Create the very numerous and perpetual life of friendship,
- Work brings satisfaction - good earnings, which make it possible to constantly renewed enthusiasm and fellowship - the system is based on common interests.

From the front is easily evident that the system of network marketing in its essence and the overall width so good that to a laic – the one who does not understand even basic characteristic of MM-and that even it is not easy even to believe.

One of the essential characteristic of MM-us is that they are all easily available to many information. Participation in seminars, information meetings and the second is not driven by anybody's previous membership or the extent of the work while in pyramidal systems that do not.

I want to especially point out probably the biggest cause resistance people to get involved in network marketing, and that is very important misunderstanding regarding the understanding of the basic work MM and considering that the MLM Company with the sale, within which are going from house to house and offer products for sale. That is why many have mentioned in MM and immediately "shout" excuses as it was not for them, that they do not have time for it (and normally will not work) and so on, and I stress once again that the network marketing system and buy the cheapest to traffic goods (sale and purchase) performs under RECOMMENDATIONS.

Therefore, it is simply to promote the product that is in the MM-to merchants do not need (for sale), but promoters for the product placement because the buyer will buy the product itself, but to him it is not a promoter of sales sold (but it is only met with its quality and benefit of purchase), and therefore the work in the MM-in ends when the potential buyer is familiar with the successful value products that when people understand the value of what it offered, and it should be.

Otherwise, really is a great mistake if the MM is compared to a job with a direct selling product, and is just so very important in the first contact inevitably explain - drastic understand the difference between sales and recommend. Who realizes these two things will very quickly move through the success of (exempt from the errors that the network should be "itinerant traders").

3. IMPORTANT ASPECTS OF WORK IN NETWORK MARKETING

Many authors point out and emphasize (a practice of continually re-confirms) the importance of the first steps, and it is especially noted that every beginner and before entering the MLM system has to get a clear picture of the specific network-marketing placement of goods and services as follows:

• that the company's network marketing smart consumers offer a perfect way to achieve a great discount and get the goods to your home address, and mostly just for inclusion in the network;

• to MM - the company provides the rules of established bonus points - compensation in cash for all that someone else bought it (so now and in the future) to those who only recommended respective customer buying favorable to him;

• to people if they join the system as sales promoters expect two kinds of work:
- Recommend (promoting) products and
- Sponsorship (not just turn on, but also take care of their staff and work with them) as

are themselves already felt and perceived in contact with their sponsors - people who have advised them MM systems, products and other information;

• that is already very Enrollment in MM system obtains rights and open up opportunities for:
- The purchase of quality products by preferential prices
- Your own work with generous and continuous support from sponsors,
- Achievement of good earnings (adequate filed work),
- Helping others to grasp the opportunities;

* That in network marketing, there are three ways of earning money:
- Sales (which may, but need not be the aim of engaging in a job MM)
- Recommend products and systems, and MM
- Construction of the network (only the construction of the network may be a "big" and the huge earnings, and is building a large network of its own imperative for all those who want to get to the great earnings);

• MM system to search and well rewards the ability to "selling" himself and their own values as sponsors and mentors for the time actually conducting the sale of network marketing opportunities, products and companies of the MM;
• that in solving any problems of the operation does not only may, but need to address for your help, or higher, because the sponsors MM - companies aim that all the accumulated knowledge of more use to the benefit of all (in MLM systems teamwork is an integral part of the success of each individual - there is no competition, and even the more everybody's success is welcome, and the result of other increases - this is the network synergies);
• that the MM companies working teaches and works as teaching MM company for its members organize and offer continuous training of the work - for work and life and the entire accumulated knowledge MM system is put at the disposal of all interested individuals for everyday use on the road to success;
• MM is a journey of success, even a very pleasant, followed b making many acquaintances with people who in any other way would not be met - such as conveniently meet people with similar characteristics often even from very remote regions, and is often the case that these relationships rather, true friendship;
• that the earnings of each other, and success comes only own steadfast and well-thought-out work with the proper use of its own network, which allows joint synergy - the teamwork of all of it associated members.

If you have correctly understood the specifics and benefits of MLM and shows clearly that in fact such a proposal and of the listed options really hard to refuse. It is necessary to the front, "right things" to present the "right people" in the network marketing this is moving through to success. Sequence of events in practice it is confirmed.

Essence of network marketing briefly and clearly expressed John Fog following:

Give them the possibility of choice
The essence of network marketing is in that
To say the right things to the right people.
Which are the right things?
Questions which relief human qualities, aims and desires…
Answers which show them how can they get what they want
thanks to network marketing.
Who are the right people?
People who – after they hear and see what you show them and tell them
- do something about it.
Your job is to give them the possibility of choice. [19]

Robert Batvin cited another superb text about the same things (that says it has seen hanged on the wall in the apartment a friend who is a builder of networks), and he read: "Your job is not in how to persuade people that this is a great business opportunity but to discover those people who are looking for such opportunities and who will, after having been found, do something related to it "[20].

Summary of essential conclusions of the MLM is reduced to:
- To say the right things the right people,
- Give them the possibility of choice and
- Does not reassure people, but only to find one who will do something in this regard.

The question is: - How to find the right people (to be told the right things and made the possibility of choice, and that is exactly the same people who will do something in this regard)?

Don Failla us pointers to the following words:

"Get those people who see the entire picture, you want to take control of your life and work, people who want to" own your life. " It is at the core of the network marketing [21]. "

Front was discovered rights essence of success in network marketing, and it should all passengers on the road to success MLM constantly kept in mind in order not to lose their orientation. (daily practice confirmed).

Many, unfortunately, does not understand that finding the right people is extremely important concept of work, but considered that the essence is that the network only need to join as many people. Although the number of important and often brings earnings must be constantly kept in mind that the MLM system is not mobile perpetuum and ultimately without sponsorship no duplication or synergy, and often no money. Mercury and convincing the lived user experience for some products and services is the biggest advantage of the best recommendations.

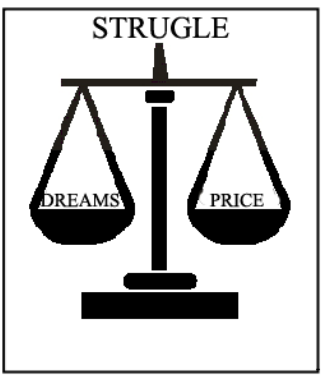
I would like to emphasize, though it is quite logical, and that each member of online consumer should be the product and service-MLM company, because the time for a shorter or longer time to become a "product of the product," MM-firm and thus become a very persuasive promoter placement of concrete products that recommended for purchase others. Otherwise, it would be occurred even comical situations - that promotes fatty products for weight loss, bold assurance that there are products for safe and speedy growth of hair, etc.

Personally conviction gained by using the product is the biggest advantage in the MLM business, and certainly an important weapon in the way of success.

4. NETWORK MARKETING STEPS OF SUCCESS

Famed manager and businessman Li Ajakoka at one time said: "Management is nothing other than motivation," and many other authors motivation placed in the foreground and without exceptions, because it is considered the main motive power. I would like to emphasize that in the network marketing motivation has to be in practice and is primarily a product of the network. If the net flow, living and working is simply impossible to remain indifferent and inert, while all the moving around and constantly re-runs. Examining the indicators of the network, who are the faithful reflection, it can not remain unobserved.
I consider it important to remind and to the MLM-motivation to set actions that the sponsor is taking to members - sales promoters encouraged to do something to be done, and for that I have does not have enough determination (to start or hold on to the end) but to and I want to. Method to have the choice, but the hit can be achieved if it motivates you more suitable to his personality and his vision. Wired positivism is that the majority of great help because the network is not trivial set of people or it may be.
Despite the individual goals and a common network strives for this goal that the entire structure of the network actually is, and must be a harmonious team. Hence the team spirit, friendship and fellowship in the special moments of a very strong group motivators, and often also a sense of belonging to a team is equally important as a motivator and tendency toward the set goal. Commitment and satisfaction in the realization of set, with the adoption of common criteria and criteria of values, often are of significant awards and recognitions. The team must enjoy the process of team work, a leader is to motivate him and then enjoy the results of which will inevitably occur.
Members of the network are always looking for leadership and should be to ensure, but that someone could lead to another, I must become the leader (the key man, the leader). To sponsor could keep people in the right direction in the network-marketing business is very important that it must do the procedures, not words, because the followers to do what the sponsor - the leader for (and not what the leader says), and only brings concrete work success and that the network should be multiplied. It exists and is working to ensure that multiplication.
Conduct by providing personal examples in the MLM-effectively be made in accordance with:
- Do not say, but the show,
- Do not talk about work, but work,
- Understand, and continually use the system and
- Not only allow, but constantly making duplication.

To someone could permanently contribute personal example must be remembered that the success of the process, not a destination, and be aware that personal upgrade - personal development and growth of obligations, not only by myself very, but it is a precondition for growth and network - job. Only under the condition that staff - followers recognize and realize the growth leaders - leaders there are real prerequisites to themselves and grow and realize that the growth is limited only and exclusively the duration of human life. Personal example of leaders they must lead to that and it depends greatly on the style of communication and cooperation in the network.
The business network marketing has no mysteries. The only thing needed is a "clever" and meaningful work, so why should constantly seek wisdom to conduct this work. Knowledge in the network marketing get doing the job - with the work. Network marketing and life working on the same principles - building a career in network marketing learned very much about the life, enriching it and gives it meaning by injecting lot of positive energy in daily life and work.



Quality MLM - companies constantly use a wide range of extra material (work resources) external motivation for their networked members - primarily sales promoters. For this purpose are used various prospectuses, brochures, books and audio, video and DVD materials (tapes, CD, DVD), many information meetings and seminars. Using all-MLM system offered funds outside motivation to be a result of each individual to his inner motivations. When that time arrives, then closes the circle because once launched internal - our own motivation every towing to success - that dreams his own dream that is to become successful.
The success of (the dream of many) in MLM-in "easy", we (with generous help of others), but it inevitably has to pay the price of success by investing their own efforts - work. Network marketing system is programmed steps to success and should be used according to the known and established technological procedures network-marketing company.

Active network builders (times to the success of) the question of internal - personal motivation of course can not come into question because they have not only for himself, but to followers constantly working on it. Duplication these activities is always stressed, it is desirable and it is very useful because the investment in self-giving is much increased performance.
Internal struggle for the success we can show by a picture - scales
Calculations are clearly quite simple - to the specific goals can be reached by paying the specific cost of success, but large Calculators often bad pass because it would like to get nothing for something that is with less investment of effort and work to get to the greater success. Strict use of nominees operations and steps of the network-marketing companies is the best calculation - this is the only safe combination that has proven successful.
It is extremely important, and steps to study well, but more importantly strictly observe them. Their application does not require a great knowledge of economics or possession of other special knowledge, no special expertise or a great education. One of many is to make meaningless, unpractical, superfluous or unnecessary steps. One is quite sure that the work of such steps, in practice much tried and tested, the shortest and very safe way for the successful development work in their own MLM - us. It is necessary to try to fully understand their value.
Can you be a skeptic, but just to check up close really offered, and this implies that the run of their reality and efficiency. To anyone caught fish everyone is clear that the sea "fish" (fish), and in order to be successful in it must learn how that can work effectively. The MLM-in is offered to teach those who have already learned and experienced, and it was because of them should raise serious facts in regard to the just apply to even with their assistance. This is the manner and means in the way of success in MLM-in.
MLM system is organized system, with its own structure, rules of operation and provides a wide range of obvious benefits of each of his member, but in practice it is very different uses. The company and senior sponsor organize even larger events, info-lectures, seminars and public promotion. They should bring as many friends and acquaintances. These are places where the staff is always there, there is happiness of people who work successfully MLM business; there are familiar methods of work that meet the new products and much more. These events are really showcase the work because the contact with the MLM system is certainly in no way can be realized through advertisements on the radio while in the morning getting ready for work or evening while watching TV. On MLM conferences running business opportunities and how that can achieve success.
All without exception, the authors point out, and nominate the most requirements to achieve success in MLM in decision-making and set goals. In this context to emphasize that the goals set period without achieving remain only wish. Many are in daily life for many times and noticed verify this truth. Desires are rarely realized because of them not weaved no energy, and decisively drawn and terminologically specific goals in themselves, and contain all the necessary energy that is without exception must invest in their achievement.
Tact is to determine the real and at the same time as major goals, and among them, and especially his life goal, because his influence on the structuring of any other very large (though that many are not aware of). The aim must be to visualize, and not just on paper or the image but rather deeply in my heart, because the only way to become a strong driving force of action that inevitably have to take on the road to success.
It is not hard to mention, but especially important to note that our goals for the undisputed lead dreams and the dream of successful development process entails and requires an emotional investment in the dream to grown our thoughts and flown in feelings. Thus, when the dream detects and visualizes must simply go for it and achieve it. It is so simple and at the same times the greatest wisdom of his achievement.
It is important to know the essential prerequisites and conditions for the efficient and effective travel MLM through success, and by Džonu Maxwell, they are:
- "That at any time renounce all that I am so I accepted everything that I can become,
- To feel invisible as I could do the impossible,
- That I believe in God means, because the dream bigger than all of my abilities and acquaintances,
- That when I feel discouragement I last, because where there is no faith in the future, there is no power in the present,
- To attract the winner to myself, because big dreams attract great people,
- To see themselves and their people in the future "[20].

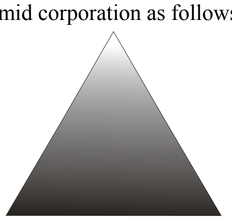
Most authors, and particularly highlights the importance of readiness to go on the trip (the success is a journey, not a destination). This implies the willingness of perseverance in the negotiation of barriers because they are inevitably appearing in various forms. Only trip includes personal change and development, and during this process reveals the insight that the success in network marketing is actually possible for everyone: for housewives and for businessmen, students and pensioners, athletes, workers at the factory, private entrepreneurs and ... for everything that went decisively to travel aware that the life we live, thanks to what we receive, but to create life, thanks to what we give.
"From birth to death all head to some of life's paths. They are for most people committed what is called the juncture circumstances or luck. These are tortuous, uncertain ways in which in most cases, people feel lost and helpless. Unlike such roads and such people, a small number of people who choose to be otherwise, motion paths

wide vision, action and self-confidence, roads leading to the large, elevated goals and mission. Everyone, of course, has a chance to cross the roads to success, but it is a prerequisite to comply with some recipes that are evident helped many "- the words were written by Dr. Nicholas Čanka in his book" MLM path to success "[21].
In network marketing this basic prerequisite is very tried and proven, and it is the MLM the path of success simply implies. Every one of us is an individual but surely convinced that some of our decisions de facto determining our future destiny. Analysis of the sequence of events it is easy to identify and find - make sure that with their usage actually depends the efficiency of our journey.
All journey start with the first step. The first step determines the direction of our movement and is therefore extremely important. Although by different authors, there are small differences regarding the steps to success in MLM-in though in principle they can be divided into the following:
1. own inclusion in the MM-company,
2. formulation of own dreams, the reasons and goals,
3. determining own capital to the success of (personal motivation, specific and general competence, the list of people),
4. having the necessary knowledge and skills,
5. individual and group contacts and presentations,
6. inclusion of consumers - the development of its own network,
7. user creation of satisfied customers and sales promoters.
The front should be added that the inevitable standing with them on the path to success must be constantly training and have instable endurance, because the MLM-in to the goal does not come only by those who refrain.
Summing up the front can be concluded that the network marketing is an ideal way to maximize his work - that is the real life and work, constant communication, application of knowledge, and promotion duplication lift the level of self-confidence, motivation and self, and to simultaneously achieve significant Material recognition and reach of free time and a privilege to be in life can do what he wants, not what you must.
However, large number of collaborators in the network marketing falls into many errors defining their goals in his career and only the financial earnings. Thereby, they are uncertain of the fact that the career and work in network marketing is only way, way and means to get to higher goals and aspirations to be the best you can be. Such success on the road let go, lose motivation and negative, and often a destructive effect on the structure of its associates and to the system in general. These are people who do not know that anyone's success does not come by itself, that every success has a price that had to be paid if the goal was desirable to achieve. They are not even aware of the fact that, unfortunately, is the failure of my own and that its price much higher, and even to us he does not ask whether we want it or will not pay. All those refrain so bitter experiences have paid the price of failure.
Success in MLM-in is obviously reserved for ma and at least proactive people who even in subconscious, however, know that is perfect thing in every person the opportunity to be better than the previous best, and that the ideals which sought primarily to build its own personality, improvement their skill and verification achieved through realistic - lived life. In this case, the MLM success chance to achieve the objective. So, briefly speaking, life should not be a novel that happened to us, but the novel that we have created.

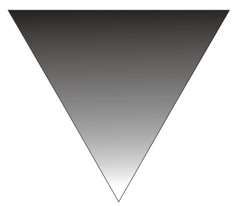
5. NETWORK MARKETING PYRAMID OF SUCCESS

Already he has been outstanding and taking into account of the prominent arguments clearly is one that the network marketing very good business opportunity for a huge number of individuals, but it is obviously a big business opportunity in particular for countries in transition. They (well that we are aware) unemployment problem number one, but they still remain blind, as well as the lives of many individuals, to identify opportunities that online marketing offers. Instead of the review and implement as soon as possible in their rooms, regulations ensure unhindered functioning of MLM and the fast flow of goods and thus open the door across the positive developments and to diverse progress they remain blind and inert for such opportunities. It is known that ignorance and sluggishness go together in hand, but the two should shake off as soon as possible and allow the right of citizenship multi-level marketing to become part of our everyday living especially bearing in mind and must not forget is the reason (and it seems that is) that the time is very inexorable factor that can not stop - a big problem is that the flow passages and very many opportunities. Today the world is already talking about extremely large traffic numbers - huge volumes of goods and services that are placed online marketing. This profession is engaged most educated, most moral and most intelligent people so that it became the industry in which generate huge commercial transactions. This industry has been affected traffic in various spheres of life and work of people in the huge swing. MM attracts more attention of all who wish to go forward, they want to truly be makers of their own happiness and well-being, to live a life worthy of man who not only want, but are ready and willing to invest their own efforts to achieve the higher material and each other's progress, who want to feel the full freedom and beauty of life, who are ready to take responsibility for their status and their future

and, in the true sense of the word and take it into their own hands. Such a company just needs to provide that help do all the necessary tasks in this effort, they can drive away the barriers and disputes and create as much space and pure action of development.
It is the right time and need to be more specifically the sake of overcoming the mistake in the understanding and application of network marketing as a modern way of marketing the goods and services that are in our region proactively initiate such activities, which develop stronger consumer-distributors networks and better take advantage of opportunities offered by network marketing to "employment" or more along the lines of business that greater involvement of the public - individuals, but also to the benefit of domestic companies that want to start or have already begun sales and distribution in this manner.
Since the network marketing really can deal with everybody in it is literally a place for everything and without any prior preconditions whether this is a greater or lesser involvement in the affairs MM and distribution businesses. MM-businesses are systems that function by clearly defined rules, technology is established and well known, and every member of the joint enabled all the necessary training with the work - for work and life in general. Open to a wide range of self with the full support and assistance to the sponsors and the entire MM system. In progress, in every sense, there are no restrictions other than their own options under which primarily include strength decisions, willpower, perseverance and persistence, willingness to learn and set the size of their own goals.
The MM-company should include all those who only have the least need, and in particular, and inevitably there is a place for all who are under their own specific objectives set forth decided to bring at least one of the following options: an additional income, a healthy lifestyle, financial independence and personal development more leisure time, have their own business, to help others, get to know new people, achieve lasting income, leave a legacy, because it worked in network marketing really is possible to achieve such a dream (of the options call for the dreams of many, unfortunately, very much to really are).
Features MLM that make interesting and attractive to a large number of people are:
- Everyone can do without the risk and cash without the prior expert knowledge - provided constant assistance and training activities;
- To start the enterprise is not necessary any investments other than the payment of any fee (almost symbolic) although often in MM system enters buying mostly small quantities of products from the assortment of the company;
- Everyone is the boss himself, not based employment, and thus has no obligations that arise from it - it is without coercion, to their own satisfaction and interest;
MLM - enterprise allows unlimited earnings and full freedom in the available time, and the construction of a large international network of more and when you do sleep. There's past performance is actually in use and very effective.
In the MLM system one is investing yourself and time. Picturesque it may appear like this:
So, MLM system allows consumers combined managers and placement of goods and services to their investment time receive money in accordance with the effort and results achieved with what is earned in the meantime is a series of other all we needed (the nominees) living pleasure. These are the experiences of many active employees MLM on the road to success.
Based on all stated easily perceive why all recommended online marketing. Speaking about Robert Kiosaki - author of many books extremely incentives (World bestseller) regarding entrepreneurship recommends MLM because MLM-company meets several criteria, which is looking at business and investment. To the question "Is the network marketing scheme pyramidal?" Responded to the entire corporation in fact pyramid schemes (corporation has only one man at the top, and everyone else below him) and he is an example of a typical pyramid corporation as follows:



And then is given to compare that with the system of network marketing whose system look like this:



and commented that the network marketing completely contrary to the traditional model of the corporation. Network marketing is designed to bring you to the top, and not to be held at lower levels. Network marketing can not succeed if people are not brought to the top [21]. I believe that the front picturesque view says more than 1,000 words and eliminates many (if not all) misunderstandings.
Many successful people the world level are increasingly stipulate that:
- The richest people in the world, searching for networks and develop them, and all the other job seekers;
- Key financial success lies in finding or building your business network;

- The difference between winners and losers sets the goal line.
Specifically, the winner in the network marketing is not important whether they will cross the finish line first or last - they care and are aware that it is essential that it pass. Losers actually drop before they attempt to win. Many of the losers actually run 95 m of 100 meters race (though, unfortunately, almost none has awareness of it). Therefore emphasize the need to last to the end times, which leads to the wide podium this does not at this stipulates that any outstanding speed nor determined duration of the trip.
Everyday life shows us that the most difficult to manage self and is just that valuable help during the MLM journey success continually provides each determined to their goals and actually achieve

6. CONCLUSION

Network marketing is here and it will continue. He is obviously much more than just the specific way of marketing the goods and services - it is quite a new approach to the laws of free markets and globalization. Its merger of producers and consumers ensures the long-term operation of the system given the fact that consumers themselves have the ability to directly convey their needs, the will and wishes manufacturer that they should meet their just such a product (whose sales and charges, so I already provided) and a new cycle of business only should also organize. Indisputable is that it can and should apply everywhere in the world and the online marketing clearly appears as a possible factor of national success. The richest use it excellent for the benefit of every individual and help the whole community.
Employing a "unlimited" number of people that, in constantly available ablative care proven quality and professional team, do more or less successfully without any other except their own limits really is worth every attention to the end-respect and respect, so it is really strange that these options on our spaces are not even remotely enough recognized nor given them the required attention.
Until now realized the result of an action only proactive individuals who were enough to free their own internal "perspective" type in some of the most utterly random contact familiar MLM system that their happiness does not know any boundaries, but rather its magnetic currents attracts same hearted charge At least "electrified" individuals, giving them the ability to access the shared table.
I am convinced (including in the above and still lived by them) that the network-marketing systems in many of the cases allow the best path to success for investing maximum efforts to each member of the joint (and in any case it is possible more of them) brought to the top of a large network - marketing pyramid that is the goal - to victory. There really is a place for all those who are ready to make life more than in the course of his life take for themselves.
For the long time world-class promoted proactively in network marketing are all necessary conditions for full growth and achieve extraordinary results. It is in the network marketing initial Kaps for a wide range of further clear with each other skillfully intertwined actions and reactions with a view to activating the internal power of individuals to achieve a number of us all the required results (up to the level of self).
Regardless of the many opportunities that already passed the time in which we live, believe that online marketing will never be substantially affected because it is based on solid words and direct communication as necessary every man.
Knowledge and benevolence are the human virtues that are providing multiply. MM world is a world in which the provision of multiple returns to then again it could give (and receive) more. That is why I recommend MM systems because they can really enjoy every step of their own times of success, because it can be happy and satisfied with the dreamer who, children's imagination and curiosity and self-confidence diva, wins and applied, multiplies and others share their knowledge, skill, joy and success. In MM systems to get everything and immediately applied, with fast and enjoys the results.
Only in the MM system, everyone has complete freedom of choice: with whom, when, how she wants to do and how much progress ... and everybody's success is desirable and welcome. Only in MM in a systematic and continuous education, self educates and enlightens, builds unity of personality, to develop determination, patience, perseverance and flexibility, diligence, self-confidence and immodesty, developing wisdom and ability to communicate, beyond the alike views of freedom and creativity and much it also required for any human soul.
There is certainly a lot of business opportunities if you work to live, but MM business opportunity is unique and special in particular those who work there and see the meaning of life, living to work and to be free and happy. They deserve the chance that they simply need to provide and because it is too much of those who do not live your dreams, because they live their fears.

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USINF IDEF STANDARD FOR MODELING OF PRODUCTION-INVESTMENT BUILDING

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Summary: *Certain CASE tools have been developed for the purpose of process modeling. This modeling is realized by using a standard for functional modeling of IDEF0 realized through BPWin tool. Business process improvement can be achieved by using some modern strategies and methodologies that belong to the Family of integrated IDEF methods, like for example: BPR, CPI, IPD, TQM, TPM etc. In paper is given functional and informational model of ″Investment building of production facility″ using graphical language IDEF0 that is, CASE BPWin tool.*

Keywords: *CASE (**C**omputer **A**ided **S**oftware **E**ngineering), IDEF (**I**ntegration **Def**inition), BPWin (Business **P**rocess **Win**-dows)*

1. INTRODUCTIONS

IDEF (*Integration **Def**inition)* is represented as set of standardized methods and family of graphical language for informational modeling in field of **S**oftware **E**ngineering (SE), business processes and objects, and improvement of business process. In frame of project ICAM (***I**ntegrated **C**omputer **A**ided **M**anufacturing*), was developed at the end of 1970 as IDEF (*ICAM **Def**inition*) standard, by USAF (***U**nited **S**tates **A**ir **F**orce*), whose goal was to improve manufacturing production productivity using **I**nformation **T**echnology (IT) and modeling [2,3,6,8,12,24,25,30].
The goal of newly developed IDEF technique was to enable experts to comprehend problems from different views and levels of abstraction. Because of that, family of integrated IDEF methods presents basic tool of some modern strategies and methodologies of business process improvement, like for example: BPR (***B**usiness **P**rocess **R**eengineering*), CPI (***C**ontinuous **P**rocess **I**mprovement*), IPD (***I**ntegrated **P**roduct **D**evelopment*), JIT (***J**ust-**in**-**T**ime*), PPC (***P**roduction **P**lanning and **C**ontrol*), QFD (***Q**uality **F**unction **D**eployment*), TQM (***T**otal **Q**uality **M**anagement*), TPM (***T**otal **P**roductive **M**aintenance*), etc. [5,9,13,15,18,24,25,28,30]. Applying of family integrated IDEF methods, which can solve narrow class of problem and general methods, attempts to eliminate deficiencies of narrow class of problem and general methods, exists strong software support which integrates IDEF methods, and enables connection of IDEF methods with other tools, above all software for simulation of business processes, software for management of costs based on activity etc.
Some families of integrated IDEF methods are: IDEF0 for modeling functions, IDEF1 for modeling information′s, IDEF1X for modeling data, IDEF2 for modeling simulations, IDEF3 for modeling processes, IDEF4 for object-oriented projecting, IDEF14 for modeling networks etc (table 1) [11].
All of them are used in different purposes as technique for informational (semantic), modeling of data and as formal graphical language, for needs of relation modeling of data and forming relation database (RDB). Initially of IDEF0 language for functional modeling was created on the top of SADT (***S**tructured **A**nalysis and **D**esign **T**echnique*) technique, and one of families of these methods (IDEF1X method, which was the first published in 1993) with NIAM (***N**atural Language **I**nformation **A**nalysis **M**ethod* or previously *Nijssen′s* or *An **I**nformation **A**nalysis **M**ethod*) method presents precursor of EXPRESS software tools for development of STEP (***S**tandard for the **E**xchange of **P**roduct Model Data*) applications. Complementary use of IDEF and UML is given in paper [12,21,27].

Set concept of modeling has been accepted by USA government, Pentagon and NATO and neither document can not be defined until it is described using this methodology. Task which achieves this methodology is that it must involve problems connected for client/server architecture, that is, to connect multiple different computers. This approach enables connecting of future IS and demands system of quality defined by standard ISO 9000.

Table 1.: List of IDEF family methods

Type	Description of IDEF family methods
IDEF0	Function Modeling
IDEF1	Information Modeling
IDEF1X	Data Modeling
IDEF2	Simulation Model Design
IDEF3	Process Description Capture
IDEF4	Object-Oriented Design
IDEF5	Ontology Description Capture
IDEF6	Design Rationale Capture
IDEF7	Information System Auditing
IDEF8	User Interface Modeling
IDEF9	Scenario-Driven IS Design
IDEF10	Implementation Architecture Modeling
IDEF11	Information Artifact Modeling
IDEF12	Organization Modeling
IDEF13	Three Schema Mapping Design
IDEF14	Network Design

For procedure of modeling are developed suitable CASE (*Computer **A**ided **S**oftware **E**ngineering*) tools. During manufacturing of this process is used standard for functional modeling IDEF0 realized through BPWin *(**B**usiness **P**rocess **Win**dows)* CASE tool [4]. On Figure 1 is shown a general model of system development [26,30].
IDEF standard is available at Web site: http://www.idef.com/ and http://hissa.nist.gov/ !ftp/idef/.
In early 1990, IDEF Users Group, in cooperation with NIST (*National Institutes for Standards and Technology*), has begun creation of making standards for IDEF0, published in 1992 (U.S. Government standards documents), known as FIPS (*Federal Information Processing Standards*) [14]. These standards are under coverage of IEEE (*Institute of Electrical and Electronics Engineers*) and accepted by ISO (*International Standards Organization* or *International Organization of Standards*) [16]. IDEF0 and IDEF1X are techniques of modeling based on combination of text graphic which are presented on organized and systematic manner to increase reasonability and to supply logic for potential exchange, specified requests, or in other manner, to support system analysis by levels.

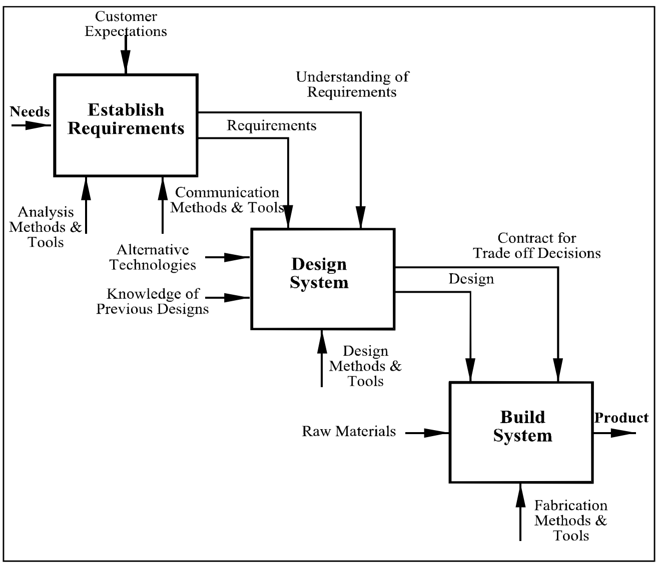

Fig. 1.: Develop system (IDEF0 Model)

2. IDEF0 - FUNCTIONAL MODELING

Reasons which have motivated creation of activity modeling are [1,7,10,17,19-25,27,29-31]:

- To serve as documentation and manual for description of complex activity and procedures and manuals demanded by standard ISO 9000. One of the basic rule is if documentation is larger – less the reading. Document of one or two pages with diagram, is going to be cursory previewed and only when there is time for that. Documentation consisting from many pages has a great chance not to be read for months.
- To enable fast organizational changes, because model of activity documents important activities and enables insight into critical activities which need to be performed with suitable resources.

Most important benefit in application of activity modeling is prototype access where in a fast and simple ways are checked alternative ideas. It is much cheaper to draw model of process and data model then to develop new information system. This is a very important attribute, because faster development of information technology and application of internet service conditions a need for reengineering, which demands radical redesign of activity, which is needed to describe before conducting prototype checking.

IDEF0 and IE ***(I**nformation **E**ngineering)* standards enable [1,7,10,17,19-25,27,29-31]:

- Execution of system analysis and design on all levels, for system constructed of man, machines, materials, computers and information's;
- Making documentation as a base for integration of ISO 9000 standard;
- Better communication between analysts, designers, users, better communication between analysts, designer, users and managers;
- Enables discussion in teamwork to accomplish mutual understanding,
- Enables management of large and complex projects.

IDEF0 formalism is based on SADT methodology. Development in 1985, by Douglas T. Ross from company SoftTech Inc. from Boston (Massachusetts – USA) [29].

Semantic of graphical language IDEF0 implicates on meaning of syntax language component and lightens interpretation correction. Interpretation describes parts like notations for activity and arrows and interlines of functional relationships.

By functional analysis of IS, is defined dynamics and is needed to define:

- Diagram of context, that is system boundaries,
- Activity stem, that is, to establish vertical connection between activities,
- Decomposition diagram, that is, to establish horizontal links between activities.

Rectangle (activity) and arrows (information carrier) determine relationship between activities and information's. Relationship is shown on figure 2:

Arrows from the left side of rectangle are defined as Input. Arrows which enter rectangle from above are defined as Output. Exits are data or objects produced by activity.

Elements shown on figure 2 can be described with sentence: "Under Control, ACTIVITY, from Input makes Outputs, using Mechanisms". Arrows on bottom page of rectangle present mechanisms. Arrows pointed up identify meaning which support executed activity.

The graphical modeling tool represents product functions as block boxes, while flows as entering and leaving arrows on either side of the function boxes applying M-IDEF0 (Modiffied IDEF0) [12].

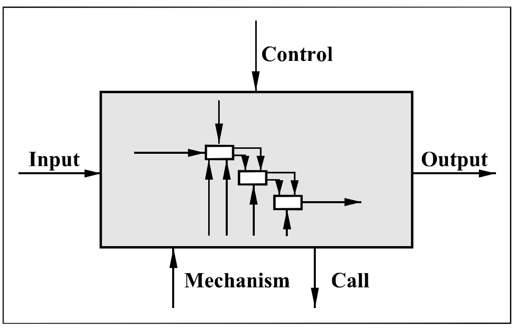

Fig. 2: Basic concept IDEF0 methodology

3. FUNCTIONAL AND INFORMATION MODEL

Based on above defined assumptions, the first discuss is functional modeling where with functional decomposition would be identified *Information model of production-investment building* in the frame of functional model

process *Production-investment building*. For performing of these activity, it is used graphical language IDEF0 that is Case tool Bpwin. IDEF0 technique is typical graphical language which enables process description according ISO 9000:2000 standards request.
Functional decomposition needs to be performing through next subordinate activity:

- To define model limit,
- To define activity tree,
- To define user's requesting,
- To define decomposition activity diagram.

Resulted activity by decomposition, on the last level, needs to be described.
To define model limit is connect for supposition given for developing process *"Information model of production-investment building"*.
In the frame of determining model limit it needs clearly define the targets which must to next elements content:

- reason of model modeling,
- results of activity presentation,
- what model user would made with it,
- model purpose.

Answers on these questions must give to help in focusing on problem supposition.
Next questions which requests answers, are:

- which are assignments on given task or activity,
- which is sequence of events,
- how is control performs and
- which resource are used.

Context diagram defines with rectangle which represents study of model limit. The arrows show how, in that model and out of them, information flow.
Context diagram is the highest level of abstraction which, by decomposition diagrams would be lead in lower level of abstraction.
To defined model limits is necessary because, where its must be stopped with modeling, before all.
This problem must be considers from aspect:

- width (to define watching elements) and
- depth (to define detailed level).

Model width is connected for context diagram defined (which is in IDEF0 notation marked with A0) and the first level of decomposition is signed as A1. In the frame context diagram it must to take care of defined input sets, controls and mechanisms, which produce output sets that is in this level to generalize observed problematic with less details.
Model depth is defined with decomposed levels, where is defined detailed levels. Decomposition went according defined possibility of primitive process. It recommends that is needs to start with defined of output arrows, and move on to input, resources and controls. It starts from the act that every activity has appropriate outputs which can be identifies. During define outputs it must to take care of negative outputs, which causes feedback arrows.
Next elements which must be define, are input arrows, which are transformed cause appropriate output with help of appropriate mechanisms and control.
With aspect IDEF0 standard like and ISO 9000:2000 standards requests, it would be defined like the first step appropriate context diagram, it sets and watching model limit.

3.1. Context diagram of functional production-investment building

Fig. 1 shows functional model context diagram of Information model production-investment building developing in regard model limit define.
Context diagram consist next elements:

1) Input information are: Investor's information
   - Information from State institutions
   - Ground's information
2) Output information are Information to State institutions,
   - Information for investors.
3) Mechanisms are:
   - Responsible planner/agency
   - Commissions and controls,
   - Responsible performer/agency.
4) Controls are:
   - Laws, regulations and sub obligation acts,
   - Standards and normative

Fig. 3 shows Information model production-investment building model. The first step is established decomposition diagram that is horizontal link definition between jobs/activity defined in the first level.

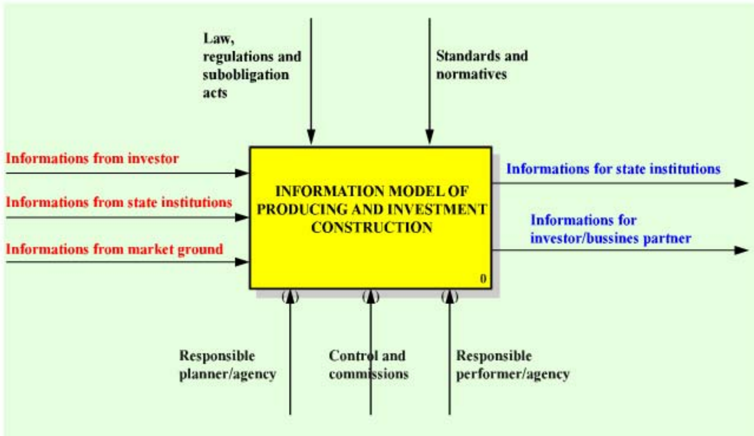

Fig. 3.: Context diagram which defined model limits

3.2. Decomposition diagram of Information model production-investment building

The model of decomposition process diagram production-investment building would decompose on four global activities (fig. 4):

- ➢ Technical documentation and process,
- ➢ Investment program,
- ➢ Building and building site organization,
- ➢ Control and supervision.

IDEF0 standard, this very complex process described on figure 4, with diagrams on several pages, on which you can see the whole process with all needed elements. It's easy for presentation and not necessary high education of investor or donator, so that they follow marked flows. Everything is very clear, every connection, controls, call, all kind of information, it can be expecting results and to reach optimism which is necessary for successful project start and realization.

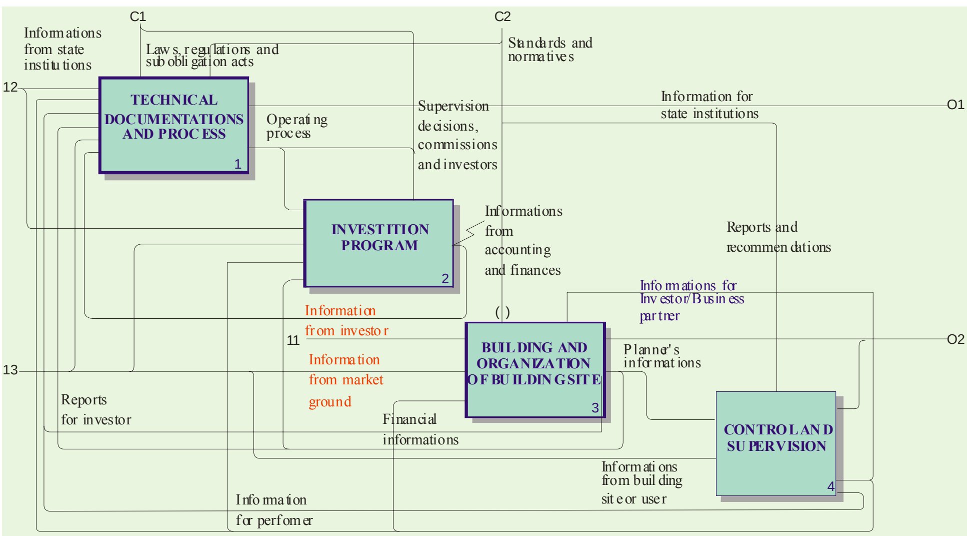

Fig. 4: Decomposition diagram of information model production-investment building

4. CONCLUSION

Functional decomposition is performed through next subordinate activity:
Like defined limit of model, which is connected with given assumption for process of development "*Information model of production-investment building*". As defined activity tree, with: Input information, Output information, Mechanisms, and Controls.
Define user′s requesting, the model of decomposition process diagram production-investment building would decompose on four global activities:

- Technical documentation and process,
- Investment program,
- Building and building site organization,
- Control and supervision.

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HUMAN RESOURCE RECRUITING PROCESS AND IMPORTANCE OF MODERN INFORMATION TECHNOLOGIES

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Summary: During recruiting candidates for certain jobs companies can use internal or external sources of human resources. Internal sources are potential candidates that work on other places inside the certain company. External sources are candidates that are on job market, they are unemployed or they are working in other organizations. Beside common recruiting methods there are also alternative ways of finding suitable experts. The most important role has e-recruiting today. E-recruiting is very important in modern management. It means Internet usage in the recruiting purposes. Rising number of people has Internet access and e-recruiting will be more frequent E-recruiting can be done by using web site of the employer, in other words company, or by many agencies on Internet. These kinds of agencies offer job ads and making selection and also sending adequate biographies to the employer.

Key words: recruiting methods, e-recruiting, labor regulation

1. WAYS OF RECRUITING HUMAN RESOURCES

If the company deals with the vacancy job position she has many options. Can reorganize work so that the entire work is done by the remaining employees, that is, not to replace workers who left work. Also, through overtime work can be resolved short-term problem, for example, in the event of temporary absence. Then there is the possibility of agencies that will provide personal, and that will not be on the list of financial companies. However, if the organization decides for recruitment to fill vacant position, it should first carry out a detailed assessment work. It is necessary to determine which consists of a job, how the work should be different from the work that has held the previous worker, who are the key aspects of work for the type of candidates and how to describe the work to apply to the appropriate candidates. There are two approaches to these issues. According to the first, conventional approach, the work should be divided into smaller sections and set goals work. It is necessary to do and personal specification, or provides a list of the necessary attributes to be characterized by workers. Another approach provides more flexibility, because companies will seek workers who have similar characteristics of employees who currently do the best job in the company. The limitation of this approach is that it will work in the organization of workers who think the same way [3].
In recruiting candidates for certain jobs and tasks, for which there is a need, companies can use internal or external sources of human resources. Inside sources are potential candidates who work in other jobs within the company, or business systems. Outside sources are candidates who are outside the organization, in the labor market, they are either unemployed or working in other organizations. There are certain advantages that can not be ignored if the organization decides to use internal resources - lower costs for selecting candidates and easier development of employees, and the candidate is familiar with working in the company. It is faster and safer way of selecting employees that the company already knows them and is easier to introduce in the job. However, a lack of a stifling of innovation, the less opportunity for the selection, slowing down changes and poor motivation.
Advertising free job can be done with the use of newsletters, bulletin boards, but in recent times, an increasing number of companies advertising is done via e-mail. All employees in the organization during the day can see a

list of all available jobs with the name and password. If you want to sign up to leave a name, number and password sent. When the work completed, the system take positive or negative information to all who sign up.

Companies need to take care of people who were rejected and their managers or specialists in human resources needs to explain why are not received and to propose additional measures for progress. Also, they should be informed about free workplaces that can compete in the future. In obtaining the internal employees, it is necessary to choose the best employees working for free, but at the same time take into account to create a positive environment and to protect people from the frustration and dissatisfaction.

If the organization decides to obtain employees through external sources, must be ready to accept more customization of candidates and greater risk, a need and great funds that must invest in the selection of employees. However, this method of recruitment has many advantages, such as new knowledge and incentives for the organization, the existing profile, the better the opportunity for the selection of candidates, enabled the rapid changes, the wider circle of business partners and enter the new ideas in the organization.

It's ideal when recruiting staff is a pre-planned and thought process and when they explored the optimal ways of recruitment. However, it is often necessary for a very short period of time to do this task. There are several ways of solving issues principal finding staff. For some the priority is to have no cost in finding staff. In this case, can be used sites that allow free publication available jobs. This will be effective if the jobs related to type profession, for example, a developer, but in this way can not be attracted to an expert in a particular area. A great way to find staff recommendations, but not personal, but professional. Audit home companies can recommend experienced financial experts; consulting companies may recommend a law, dealer managers for the sale of the company. If the candidate is professional, has a wide range of knowledge in the area that deals with, it must be a leader and in this way will the company come to him.

When a company determines that it is necessary to external recruitment, must choose the appropriate and economical method of recruitment. However, organizations often combine several different methods of recruitment. The most common method of recruitment used the ads in the local, professional and national press, the Agency for Employment and information in the company. However, in practice, people usually employed by the vacancy hear from someone who works in the company.

There are several different methods of recruitment, which are related to the business center, commercial employment agencies and consulting agencies for recruitment, selection of consultants for management, business scout, and executive consultant, visit universities and schools and business counseling. Business centers provide employers the opportunity to choose candidates from all over the state. These centers are socially responsible and sure, the candidates provided very quickly, and offer free service to employers. Commercial employment agencies and consulting agencies are recruiting methods, which is often used and allow the reduction of administrative work for employers. However, a lack of recruitment of such high price, and provides the staff that remains mostly short in the workplace. Consultants who work at selection of management need to be enable the candidates to provide anonymous and to use expertise in the areas in which the employer has not been regularly represented. The main lack of this method is the costs. Business scouts and executive consultants, may directly approach potential candidates, and they can make, and recruiting from other countries. However, scouts are very expensive and potential candidates outside the network scouts disabled. According to the opinion of students visit the universities is the best method, and this type of recruitment and offers a large choice of students who have just finished faculty. Drawback of this method is a lot of time to visit universities. Schools and business counseling provide a regular annual number of interested for a job and are a good way of recruitment of people who did not continue schooling and rarely looking for work after the first given. The lack of this type of recruitment is limited number of potential candidates.

It is not secret that many who want to change jobs do not want to put your CV on the site to find a job. Numerous polls show that about 15% of economically active population has never used the services virtual services employment (more than half of respondents believe that the search for work through specialized sites effectively, and about 14% that is a small probability to find the job). The reasons vary, but most important is that employees do not want to give your personal data on the Internet or do not believe the Internet as a way to find a job. They are afraid that their CV to see the employer which is currently running, and that fear is justified, because some companies dismiss workers if they seek to find a job in another company. Therefore, the majority of those who want to change business address to help friends and acquaintances. Knowing this data manager for human resources should be able to use a maximum of Internet recruitment, but also to have more possibilities for finding staff. This primarily refers to their work with forums and blogs, because it is often can meet the real professionals. This method is especially good if you are looking for specific experts, for example, engineers a narrow specialty or translators for rare languages. There are forums in which are forbidden to talk about free workplaces, but that calls for the search specialist can disguise the discussion on the topic associated to a certain profile recruiting experts. For example, the search manager for the sale of certain equipment can be the forum to initiate discussion about the equipment and experts for the equipment involved in the discussion can send private messages and warm them to change jobs. Another alternative way of e-recruitment is a publication of the competition for free work on the site of the company. If used this way is very important to create a simple and

suitable for the maximum potential candidates. Information must include complete information on free workplace, the requirements for employment and earnings. It is essential that the site in a visible place where the part will be published free workplaces. The top managers, a very important role to have personal contacts, a recruitment specialist for the middle level of the most frequently used contacts with training centers and centers for training of personnel. Professionals - beginners, it is possible to first find at universities [3].
Specialized agencies for recruitment of staff conduct their database of candidates. Such a database is one of the basic ways of recruitment, but also for human resources managers in companies also have a database of candidates. Within the base there and a part that refers to the former company workers who are in your request left the company. They are expert staff can contact with an offer to return the company to the new position. It is important that these candidates know the structure and activities of, and with them a higher level of company loyalty. The company Shell, for example, new jobs, primarily offers its former employees. In any case, is that any way to find personal use, but most important is not only one way, though perhaps on the most popular.

2. IMPORTANCE OF APPLICATION OF E-RECRUITING

The aim of the company is to report that a number of candidates for vacant positions to have more choices. For this reason it is necessary to advertise recruitment. Many organizations for help in creating the ad agencies turn to recruitment advertising. A special advantage of these agencies is that their services do not pay. There are several methods of giving an ad for a job, and they are internally advertising, the list of available jobs that are set outside the organization, posting ads in national, local and technical press and the Internet. Internal advertising is very fast, low costs and provide the full information for all employees who can apply for recruitment. However, limited the number of reported, and internal candidates are not compared with the external.
Free list of jobs that are set outside the organization are very cost-effective way of giving ads, especially in the event that the company is located near the center. Lack, the list can see only a small number of people and do not give the detailed information. Ads in the national press to see a large number of people, but this kind of advertising is very expensive and there is a possibility that can not apply adequate candidates. Ads in the local press are suitable for recruitment, because they read people from a particular environment in which the job seekers. However, this way of advertising is not aimed at the professional and technical staff. By publishing ads in the technical press with minimum costs makes focusing on a specific population. But the press is improper technical when it is not only seeking technical staff.
The most important modern achievements in the field of recruitment is e-recruitment or use of the Internet for the purposes of recruitment. A number of people have access to the Internet and e-recruitment will become all the more, and it is expected that this trend will be to replace all other methods. E-recruitment can be done through the Web site or the employer, or company, or through a large number of agencies on the Internet. Such agencies offer job and make a list of narrow election and the biography sent employer.
Companies are attracted to what is possible through the Internet approach a large number of people, a price web site is minimal in relation to the costs of advertising through other media. Also, organizations can significantly to savings, because they do not need to print brochures for recruiting and other documents or sent to candidates. Internet and has great speed, and read the ad because the candidates within a few seconds can respond and send your resume via e-mail your employer, a company can narrower selection of candidates to do electronically, with the help of contemporary software.
In addition to these advantages, e-recruitment has certain disadvantages. It often happens that employers are covered thousands of inappropriate application. Way to prevent this is online software that can allocate adequate application. Also, you may be asked of the candidates to fill a special application form, or to solve psychometric test and to eliminate those who are not willing to devote their time to sign up. On the other hand, companies can never be completely sure that the candidates themselves, of one's own, do this test. There is also concern that candidate for the security and confidentiality and to prevent them to send personal information via the Internet. Some agencies on the Internet have very low ethical standards and publish lack of jobs and false information. Right false biographies or copied biography competition with sites that collected bank biography you send employers.
It is estimated that in the future will come to a significant improvement of standards for such agencies to be strict control of online content. A smaller number of good business sites and many less influential sites, but their visit will be of great importance for the target groups.
Why potential candidates, visit the company web site? Visitors to the site of the experts that may be interested in free workplaces. Also, the website provides an opportunity for the company that automates receiving applications for free workplaces, using the survey to evaluate the candidates and said to them, send e-mail. To the site of a tool for recruitment of staff should bear in mind that the professional recruitment similar professional marketing. On their website the company to analyze the positions of candidates following questions - Why are the experts necessary company, what they may have on the company based on the site, how can

interest them in the company. It is very important to get an opinion about the candidates. Website must contain thorough information about the company that should be attractive for candidate and at the same time to discover all the advantages of the company, payment method, wages, the possibility of professional development, progress and so on. It's also necessary to describe in detail any free work place. The company must be sure that the information on the site of its interest potential candidates and convince them of the need to apply for a job. All information that is necessary potential candidates must be on the first section on the site for free workplaces. Web site on which it is difficult to find the necessary information leave indifferent majority of site visitors and will have a negative impact on the company's image. Applying candidates for free work place must be extremely simple and automatic. The efficiency of the site as a means of finding staff to a large extent depends on exactly than that.
When leaving their data on the site, the candidate is required to complete the questionnaire in which questions will be on the basis of which can make the initial selection of candidates, which is very economical. Web site company must be the central point of its recruitment strategy. It is very important to track the number of visitor's part of the site, which refers to the free positions.
Via the Internet information about free workplace can be a large number of people, Internet advertising is not expensive, and in addition, it is possible online list narrow election. On the other hand, the employer may be covered thousands of inappropriate application, and may be reduced to the adequate number of applications for reducing the confidentiality of data over the Internet.

3. CREATING ADS

Creating ads aims at potential candidates to challenge the attention and the reaction with the help of graphic art and design and with the appropriate verbal message. The media must be available to the target group by location and time, and target groups should be regularly read, for example, the Journal. Companies need to define in advance what all of the expected publication of the ad. It can achieve the implementation of appropriate marketing research with the help of which it is possible to obtain relevant information. I ad must be a clear target group and must interest potential candidates to work in the company.
It is very important that companies make a decision what the ad for recruiting contain, as given the extremely high cost of space for advertisements, it is necessary to use as little words. In the event that the organization wants to remain anonymous it will not advertise in the press, but in some other way. Potential candidates will be not convinced If you do not know the identity of the organization, primarily from the fear that is not to apply for a job in the organization in which they are employed. Also, if the organization does not want to disclose his name, but said information that is closer to determine, there is a possibility that the candidate thought to the wrong company. In the compilation of ads for free work requirements that are placed before the candidates should be divided in three categories - mandatory, desirable and undesirable. The first category includes requirements without which can not effectively to the work. The second part consists of skills and knowledge that will be used occasionally, and that it is possible that the company trained candidates. The third category includes features that candidate should not have. The analysis tasks will be to achieve that requirements that are set before the candidates to be completely realistic, because the only way possible to find appropriate candidates. If, for example, in the competition for building engineers as a compulsory requirement for state and knowledge of Japanese language, with high earnings, the competition probably will not tell nobody. In this case, the solution was the engagement of the building engineers with average earnings and employment at the same time translator for the Japanese language. This would be initially determined by high salaries for engineers with knowledge of Japanese language divided on the engineers and translators.
Candidates are interested in the details of work, and the name of employment will not be sufficient to intrigue. Potential candidates order to learn more about the duties, but also the possibilities of training and development, which the company offers. In the event that the company wants to hire only candidates with special qualifications, then it must emphases that in the ad. That will prevent login inadequate candidates, but with other organizations should be aware that the type of expert qualifications to be ineffective in the ad. Most companies do not publish the amount of salary in the ad, which in certain cases and justified, because the wages in some areas well-known and nonflexible, such as, for example, in the public sector. There are also some organizations do not want the public to disclose pay for certain work from fear that employees in these organizations do not become dissatisfied. Phrases that describe income are excellent, excellent, competitive, and many significant others [2].

4. REGULATIONS ABOUT EMPLOYMENT OF WORKERS

In order for company to be able to could feel free to do business and recruited staff required, it is necessary to the existence of legal regulations governing the issue of employment of workers.

To protect workers from discrimination and other unrighteous procedures in state employment are forced to constantly improve its legal regulations. International Labor Organization (The International Labour Organization) - a specialized UN agency that deals with the promotion of social justice and protection of human rights and working up a set of basic principles and rights related to work and abolition of discrimination in employment. With respect these rules and principles of the government is trying to maintain a balance between the flexibility of the labor market and job stability. Many countries are overly rigid to employers and workers. World Bank in the framework of his research in 2006 and 2007 year presents data in the state of Sierra Leone, for example, the employer of the workers must release the worker to pay compensation for 189 weeks. Venezuelan laws forbid the release of all workers with low earnings. These are the countries with the most regulations on the work, and their laws, designed to protect workers, most often produce the opposite effect, which is primarily related to women, young and non-eligible workers. Opportunities for employment of these categories of the unemployed are significantly reduced and they are often forced to work "in the black", and women three times more often than men. These types of businesses do not make any social benefits. Also, employees who work on the black "is much less protected from abuse of employers. Resistance to the employment of women and promoting gender equality and still exists in certain countries. In the Democratic Republic of Congo, the United Arab Emirates and Yemen women is forbidden to work at night, in Laos to do certain tasks manual.

More flexible work laws lead to the creation of new jobs, and on the other hand, not to break the protection of employees. Georgia has some of the most flexible working regulations and ratified all the core standards of the International Labor Organization. Workers in the United States, Singapore, the Marshall Islands, in Georgia and Brunei have the best protection - flexible work regulations provide the possibility of easy transfer from one job to another. World Bank study showed that strict regulations on the work of reducing the number of jobs. In Indian state of Maharashty rigid regulations, for example, led to the reduction of the number of jobs by 15% in the retail sector. The second set of World Bank study analyzed the effects that flexible labor regulations have on the opening of the economy. The research showed that in 90 developing countries with flexible regulations on the export increased faster than in other countries. It is also proved that flexible working regulations in an open economy can increase the annual growth of exports, even a few percent. The World Bank has made a rank list of countries where it is the easiest and most difficult to employ workers.

Tabela 1: In which courtiers is the easiest, and in which is the hardest to find a job

Easiest to fin a job	Place on rang list	The hardest to find a job	Place on rang list
SAD	1	Sierra Leone	169
Singapore	2	Panama	170
Marshal islands	3	Congo	171
Gruzia	4	Angola	172
Brunei	5	Paraguay	173
Tonga	6	Guinea Bissau	174
Maldives	7	Equatorial Guinea	175
Australia	8	Sao Tome and Principe	176
Palau	9	Bolivia	177
Dutch	10	Venezuela	178

In 2006/2007 year the twelve countries has made significant changes in their regulations on paper. Eastern Europe and Central Asia had the highest number of positive reforms, and behind them are Western Europe and Africa. Czech Republic was the biggest reformer, as adopted by the new law on work which provided more flexible working hours. Also, before the reform of the employer he is unable to dismiss workers for economic reasons only if the worker could not be transferred to another position or sent to training. The new law has eliminated this request and reduced relief period with three in two months. Lithuania extended the maximum duration of the contract for employment in the time from 2 to 3 years and facilitate the employment of new workers when demand is high, but without the high costs of dismissal if the demand decreases. Act in the developed countries, even among the most flexible, and continue to develop. And Switzerland and the Netherlands are working hours made more flexible, a new law in the Netherlands increased opportunities overtime work. Reforms in Spain are facilitate employers to turn contracts workers from temporary to permanent. Uganda and Togo have adopted new laws on paper. Uganda the law abolished the prohibition of work on weekends. Employers and employees are free to determine the days of the week which will not work, and do not need to be Saturday and Sunday, as previously. The new law in Togo extended the maximum duration of the contract for the employment of workers in the time from 2 to 4 years. Pakistan extends the limit for overtime work for employees in retail with 150 hours to 624 hours per year and enabled flexible distribution of working hours. Bhutan has applied its first law on paper, which abolished restrictions night work and the limit of 12 months for contracts to a specific time [4].

For the economic development of each state crucial issue is the existence of a flexible legal framework that provides recruitment and employment of workers. The recruitment of candidates for employment is a complex process in which, except respect the basic rules of the organization need to analyze their target groups in the labor market and the best way to present their needs for human resources.

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PORT OF BAR CAPACITY STUDY: THROUGHPUT ACHIEVEMENT AND EVALUATION

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Summary: *Problem of optimization of port capacities is everlasting and enormous. During the years, a lot of projects were published, while a small number provide to keep throughput of port of Bar increasing. Using data from 1994 to 2007, we show statistical analysis with respect to achieved throughput during the last 14 years. Also, we present some analytical results and applications. We point out that port capacity and throughput may be significantly improved and evaluated. We develop some possibilities for developing the significance in techno-economic view for port of Bar. Moreover, statistical diagrams and tables of throughput achievement for port of Bar are illustrated.*

Keywords: *Optimization, throughput, statistical analysis, port capacity*

1. INTRODUCTION

This paper focuses on measuring the capacity and throughput for port of Bar. It is important to note that in this paper, the throughput is treated as the production unit under study. This is in line with the argument that comparable data can only be attained at the level of the port, rather than the port. Over most of the period since the early 1990s there has been an oversupply of capacity for port handling in port of Bar.
For the purposes of this paper, the level properties of port capacity have also been analysed. Most of the ports that are large in capacity performance are more likely to already be associated with higher efficiency results.
Port of Bar, Montenegro, was designed to handle 5 million tons per year, and in 2006 it was already processing 2.2 million tons. To further increase the capacity of the port and speed up transshipment processes, a change in operational design was necessary and led to significant changes in terminal layout as well as in systems design. An overview of the overall port operation can be seen in many Figures and Tables illustrated below. This growth in throughput is expected to continue and will require additional capacity on the freight transportation network and through ports in particular. Some of this additional capacity may be acquired through the increased use of new operation technologies [8, 9, 10].
The rest of this paper is organized as follows. In Section 2 we give statistical analysis with respect to achieved throughput in port of Bar from 1994 to 2007. In particular, we present the throughput for different type of cargo. Section 3 shows relationship between average realized and potential capacity. Thus, it is established the real capacity of port of Bar today and perspective for its increasing. The final section provides concluding remarks.

2. PORT OF BAR: ANALYSED THROUGHPUT FROM 1994 TO 2007

Considering achieved throughput for port of Bar from 1994 to 2007, we have the following results (Figure 1) [1, 4, 5, 6, 7, 11, 15]:
- total 14-year throughput was 20647000 tons,
- average throughput per year for each of 14 years was 1474786 tons,
- average throughput per month in this period was 122898 tons,

- average throughput per day was 3964 tons.

Table 1 and Figure 1 present percentage of different type of cargo from 1994 to 2007. In view of this we can conclude:

- the biggest throughput of general cargo was 63 % in 1994,
- the biggest throughput of bulk cargo was 53.4 % in 2003,
- the biggest throughput of liquids was 71.2 % in 1995 of total throughput.

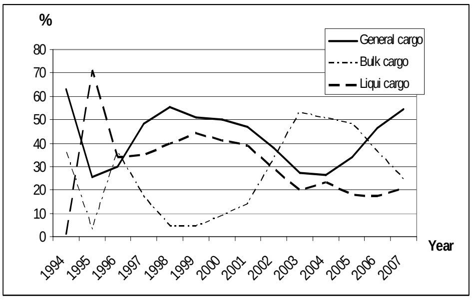

Figure 1: Percentage of different type of cargo from 1994 to 2007

Table 1: Percentage of different type of cargo from 1994 to 2007

Year / Cargo types	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
General cargo	63.0	25.5	30.0	48.2	55.5	51.1	50.0	47.0	38.0	27.1	26.2	33.8	46.4	54.6
Bulk cargo	36.0	3.3	36.0	17.0	4.6	4.5	8.8	14.0	33.0	53.4	50.4	48.2	36.0	24.8
Liquid cargo	1.0	71.2	34.0	34.8	39.9	44.4	41.2	39.0	29.0	19.5	23.4	18.0	17.6	20.6
%	100	100	100	100	100	100	100	100	100	100	100	100	100	100

In the same time the average throughput for general cargo was 42.6 % and the average throughput for bulk cargo was 26.4 %. Also, the average throughput for liquid cargo was 31 %.

Now, when Montenegrin country established independence we are in position to illustrate a short analysis in relation to diagrams from Figure 2. Total throughput for port of Bar was almost 2.2 million tons in 2007. We believe that port of Bar will be able to significantly improve utilization factor, as well as another performance and characteristics in relation to existing infrastructure and facilities.

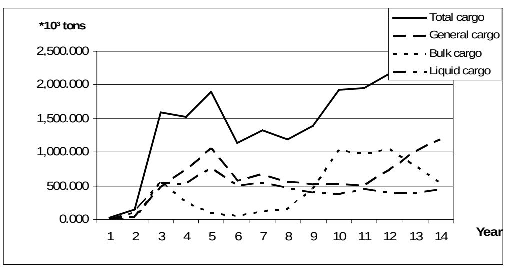

Figure 2: Realized throughput for different type of cargo for port of Bar (1994 to 2007)

According to Dekker [3], capacity can be defined as the maximum number of items that can be ‘squeezed’ through a system or its components per unit of time at a certain level of service quality. It is obviously that in up-today published researches based on optimizing capacity of port of Bar did not accent enough level of valorization the factors based on port capacity and also its correlations. So, in this paper we will try to establish a real state of facts that capacity has a huge importance, especially, real capacity. Also, it is necessary to improve the optimal intensity and correlation elements, e.g. terminal factors that are not developed today [2]. Because of that, the achieved throughput is directly connected with more level port capacity efficiency. Analysis of achieved throughput is based on the following categories:

- total throughput in last 14 years,

- real manipulative port capacity,
- the use of manipulative potentials,
- comparison with other ports.

Further, we present the results of throughput for port of Bar in 2007 (Figure 3 and Table 2) [1, 4, 5, 6, 7, 11, 15]. In view of this we note:

- achieved throughput of bulk cargo was 540900 tons or 25 % of total throughput,
- achieved throughput of general cargo was 1188000 tons or 55 % of total throughput,
- achieved throughput of liquid cargo was 449500 tons or 20 % of total throughput.

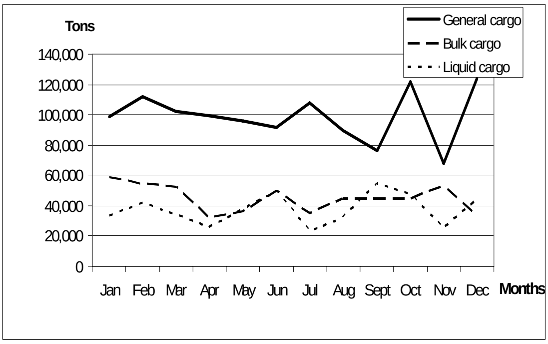

Figure 3: Throughput of different cargo type in 2007

Table 2: Throughput in 2007 per different type of cargo

Month / Cargo types	I	II	III	IV	V	VI
General cargo	98800	112200	102400	99700	95800	91500
Bulk cargo	59100	54600	52700	32100	36500	49700
Liquid cargo	33300	41700	34100	25800	37700	49600
Total	191300	208500	189200	157600	169900	190800

Table 2: Continued

VII	VIII	IX	X	XI	XII	Σ
107700	89900	76200	122100	67600	124100	1188000
34900	44900	44600	45100	53300	33400	540900
22900	32100	54900	47900	25400	44100	449500
165500	166900	175700	215100	146300	201600	2178400

3. RELATIONSHIP BETWEEN REALIZED AND POTENTIAL CAPACITY

In this section we present the real possibilities of installed handling capacities and infrastructure objects for port of Bar. It is now evident that the biggest port capacity from 1994 to 2007 has been in 2006. Total handling capacity was 2200000 tons. This capacity is expressed as

$$C_{P1} = 2200000 \text{ tons.} \tag{1}$$

Now consider the following factors:

- in 2005 there was the biggest throughput of bulk cargo 1040000 tons,
- in 1998 there was the biggest throughput of liquid cargo 759000 tons,
- in 2007 there was the biggest throughput of general cargo 1190000 tons.

Supposing that all these values are realized in one year, we have

$$C_{P2} = 1040000 + 759000 + 1190000 = 2989000 \text{ tons.} \tag{2}$$

On the other hand, the biggest throughput per month was 215100 tons (October, 2007). Similarly, assuming that the biggest throughput per month (215100 tons in October, 2007) was realized every month in a year, we obtain

$$C_{P3} = 215100 \cdot 12 = 2581200 \text{ tons.} \tag{3}$$

Next consider the following factors:

- in January 2007 was the biggest throughput of bulk cargo 59100 tons,
- in September 2007 was the biggest throughput of liquid cargo 54900 tons,
- in December 2007 was the biggest throughput of general cargo 124100 tons.

In this manner, the total handling capacity would be equal

$$C_{P4} = 12 \cdot (59100 + 54900 + 124100) = 5150592 \text{ tons.} \tag{4}$$

In order to analyze realized capacities of port of Bar, it is necessary to express theoretical capacity in the form

$$C_T = Q \cdot \frac{Laa}{L+k} \cdot \frac{d \cdot h}{u} \quad \text{tons per year,} \tag{5}$$

where

C_T - theoretical capacity in tons per year,
Q - average ship size in dwt,
L_{aa} - length of berths in meters,
L - average length of ship in meters,
k - safety space between ships (from 10 to 20 m),
d - number of working days per year,
h - daily working hours,
u - average number of working hours.

By substituting the corresponding values for port of Bar in the above expression, we get that theoretical capacity is:

$$C_{P5} = 12 \cdot \frac{3420}{190+20} \cdot \frac{300 \cdot 16}{80} = 19542857 \text{ tons.} \tag{6}$$

Then the real capacity C_{P6} can be expressed as

$$C_{P6} = \alpha \cdot \beta \cdot C_{P5}, \tag{7}$$

where
α – efficiency coefficient of port handling capacity (0.5-0.9),
β – nonuniformity coefficient of port traffic flow (0.5-0.9).

For the values $\alpha = 0.7$ and $\beta = 0.8$ the above formula implies $C_{P6} = 10943999$ tons.

Consequently, by using the above obtained results for C_{Pi} $(i = 1, 2, ...,6)$, we can give in Table 3 proportions between these C_{Pi} (potential capacity) and realized capacities of port of Bar per years from 1994 to 2007 (denoted in the first column as $C_{P'j}$). Recall that these results are in fact utilization factors related to realized capacity per year for port of Bar.

Table 3: Potential capacity results of port of Bar from 1983 to 2007

Realized capacity per year in tons \ Potential calculate capacity in tons		C_{P1}	C_{P2}	C_{P3}	C_{P4}	C_{P5}	C_{P6}
		2200000	2989000	2581200	5150592	19542857	10943999
$C_{P'94}$	220000	10%	7%	9%	4%	1%	2%
$C_{P'95}$	153000	7%	5%	6%	3%	1%	1%
$C_{P'96}$	1587000	72%	53%	61%	31%	8%	15%
$C_{P'97}$	1526000	69%	51%	59%	30%	8%	14%
$C_{P'98}$	1902000	86%	64%	74%	37%	10%	17%
$C_{P'99}$	1136000	52%	38%	44%	22%	6%	10%
$C_{P'00}$	1329000	60%	44%	51%	26%	7%	12%
$C_{P'01}$	1196000	54%	40%	46%	23%	6%	11%
$C_{P'02}$	1386000	63%	46%	54%	27%	7%	13%
$C_{P'03}$	1921000	87%	64%	74%	37%	10%	18%
$C_{P'04}$	1949000	89%	65%	76%	38%	10%	18%
$C_{P'05}$	2160000	98%	72%	84%	42%	11%	20%
$C_{P'06}$	2200000	100%	74%	85%	43%	11%	20%
$C_{P'07}$	2180000	99%	73%	84%	42%	11%	20%

In particular, from Table 3 we have

$$\eta_{PT'94} = \frac{1}{6}\sum_{i=1}^{6}\frac{C_{P'94}}{C_{Pi}} = 6\ \%, \tag{8}$$

where $\eta_{PT'94}$ is the arithmetical mean of the proportions for $C_{P'94}$ in relation to C_{Pi} (i = 1, 2, ..., 6), respectively.

Similarly, we obtain the corresponding values for $\eta_{PT'95}, \eta_{PT'96}, \ldots, \eta_{PT'07}$, respectively. Finally, the arithmetic mean of all these values including $\eta_{PT'94}$ is equal

$$\eta'_{PT} = \frac{6+4+40+38+48+29+34+30+35+48+49+54+55+55}{14}\ \% = 38\ \%. \tag{9}$$

In view of this, the value η'_{PT} = 38 % represents in fact the average realized capacity for port of Bar in previous considering period of time. Accordingly, these results are shown in Figure 4. It is obviously that percentage 38 % is a very small with respect to potential capacity study and throughput. We believe in evaluation of port of Bar in coming years. Very often the port operations are changing to meet increased customer demands as well as to adapt to new technologies. Reasons for the increase of the utilization factors of port infrastructure with the introduction of new terminal, container berth, container cranes and contemporary information systems include that utilization factor of port increases with the advanced handling systems improving the operation procedures [12, 13, 14].

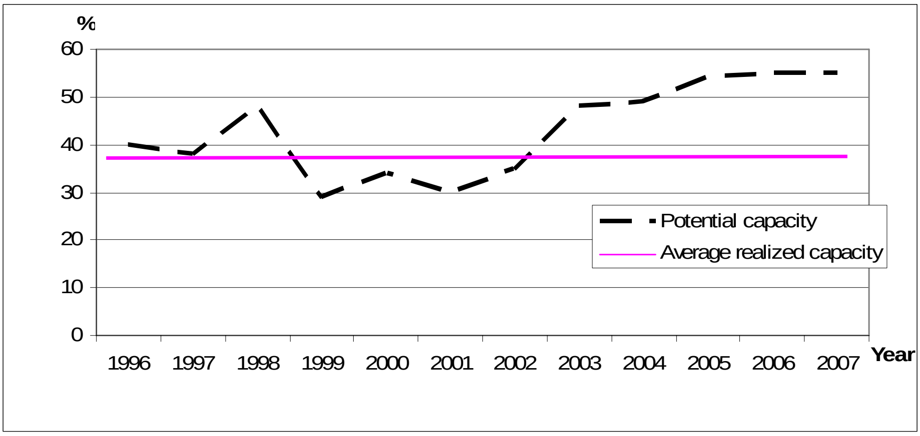

Figure 4: Average realized and potential capacities of port of Bar

4. CONCLUSION

The review shows that good solution approaches for real and potential capacity for port of Bar are already developed, but nevertheless there are still many open questions. Therefore, a new solution approach with a tactical focus should be developed in relation of port capacity. This approach should already have the basis for port of Bar regarding aspects of capacity.

The paper has analysed in detail this topic both through theoretical and practical studies, highlighting the effects of different forms of port capacity for port of Bar. Looking at Table and Figure, it is clear that real and potential capacity only modeled the cargo flow and capacity constraints, as in the generic statistical analysis. Additional other restrictions are not taken into account. It may be interesting to research the integration of more practical restrictions of capacity and, consequentially, a new solution algorithm for this problem.

This paper addressed the optimal capacity study for port of Bar. Unlike previous studies, this study is based on a detailed statistical model of handling activities in different years for port of Bar. This paper proposed simple analytic model for determining the optimal port capacity. The objective of the model was to maximize throughput per year and in the determination of maximum level of port utilisation factor. Finally, as it can be concluded from the tables and graphical results, that existing capacity of port of Bar may be significantly increased.

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EXPENSES OD DEFENCE OF SERBIA AND POSSIBILITIES OF NEW TECHNIQUES APPLICATION DECRESE

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Summary: *Defence system as a constitutive system of public sector requires permanent source of financial support, which is manifested through budget as financial institution. Public sector expenses are necessity as world trends in this area. It is pinpointed to decrease of military budget expenditure in percentage in total budget by applying new information technologies (IT). At the same time economy development of the state would be enabled as well as increase of minimal amount of military budget. This paper shows results of the analyses of the present state expenses of Republic of Serbia defence in comparison to neighbouring countries and NATO countries.*

Key words: *defence system, expenses, tax evasions, public sector, military spending, informational technologies, financing, defence expenditure, brutte home production (BHP) and budget*

1. INTRODUCTION

Consumption for the defence system needs is a part of total public consumption which is financed by the republic budget and enables fulfilling the aims and tasks of defence.
Military organization is typical state product aimed at state protection from possible aggressors. This state institution in developed countries has multiple effects on social, economic and technology expenses. Practice has shown that military universities, military systems and technology sections in corporative organizations are basic incubators of technology innovations. At the other side military organizations through their technology equipping appear on the side of new technique and technology buyers.
One of the negative aspects of IT application is in the field of warfare, which has always been followed by destruction of people and their achievements. It is not completely clear how armament race helped IT development, bit Internet development improved armament race. Nevertheless, we can state that today a strong arms market has been created where large trade transactions happen with specific principles of functioning compared to other markets. [2].
Limiting public sector, tax decrease and regulative economic function of the state decrease should secure a broader space for private capital and private initiative. At the same time enabling adequate functioning of public sector with smaller financial funding is possible with introduction of information technologies.
Budget in now placed in the function of general development and financial stability. Inequality is followed by deficits and solicits and is connected to certain oscillations of economy parameters.
Public consumption in Serbia:
- Is high comparing to the level of country development,
- Introduction in (BHP)of Serbia is on Middle Europe countries level which are 50-100% more developed than Serbia,
- The largest position in its frame represent expanses for social purposes including which pension expenses,
- Structure is improved during previous years by expenses participation growth for health and education as well as public investment increase.

Financing defence expenditure: represents cash expression of material fulfilment of the needs of defence. For mere financing of defence expenditure, the following must function:
1. Financing source of defence expenditure,
2. Of budget system,

3. Budget as an instrument of defence expenditure financing and
4. Ways of determining means for defence expenditure financing

2. SOURCES OF DEFENSE EXPENDITURE FINANCING

Dividing sources of defence expenditure financing may be done as follows: 1) Basic sources of defence expenditure financing and 2) Other sources of defence expenditure financing.

2.1. Basic sources of defence expenditure financing

Starting from the fact that defence system is a part of society system, or a subsystem of a system, thus, *basic sources of defence expenditure financing* must be the same as total public expenditure financing.
Defence expenditure financing is directly dependent on economic possibilities of the country, or BHP achieved in the current period. The high of BHP, its real growth and inflation in the Republic of Serbia for the period of 2009. – 2011. is shown in Table1.

Table 1: BHP protection and inflation in the Republic of Serbia
(***Source:*** *Ministry of finance of the Republic of Serbia [18]*)

Serial n°	TITLE	Projection		
		2009.	**2010.**	**2011.**
1.	BHP billions of dinars	3.169,70	3.564,80	4.012,20
2.	BHP real growth in %	6,5	6,5	7,5
3.	Inflation, at the end of the year in %	6,0	5,0	4,0

Predicted separations from BHP achieved for period 2009. – 2011. In the Republic of Serbia by functional classification are shown in Table 2.

Table 2: Predicted public expenditure in the Republic of Serbia in % BHP
(***Source:*** *Ministry of Finance of the Republic of Serbia [18]*)

Serial n°	EXPENDITURE TITLE	2009.	2010.	*2011.*
Total expenditure		**44,3**	**42,9**	***42,0***
1.	General public service	3,6	3,4	*3,3*
2.	***Defence***	***2,4***	***2,4***	***2,4***
3.	Public order and security	2,3	2,2	*2,2*
4.	Economy business	6,5	5,9	*5,8*
5.	Environment protection	0,3	0,3	*0,3*
6.	Apartment building and community development	1,5	1,5	*1,4*
7.	Health	6,0	5,9	*5,9*
8.	Recreation, sport, culture, religion	09,	0,8	*0,8*
9.	Education	4,0	4,0	*4,0*
10.	*Social protection*	*16,8*	*16,5*	*15,9*

Problem in our country is the fact that in percentage of BHP separations for defence expenditure financing *(Table 2)* means for financing military retirement funds are a part of. Its participation in 2006. was 0, 61% BHP, and in 2007. *0, 72%,* BHP with a tendency of increase in the following period. Real basic sources of defence expenditure financing in 2006. were 1,69% BHP and in 2007. 1, 72%, BHP, and not 2, 5% BHP as it was stated in Budget and Economical Fiscal Politics Memorandum for 2007. with projections for 2008. and 2009. [18].
Elementary sources participation in defence expenditure financing in *2006. Was 98,52%, and in 2007. 94,41%* [6]. Based on elementary sources participation in defence expenditure financing, size, equipment and ability of the defence system *mostly depends on basic sources of defence expenditure financing.*

Countries in the surroundings have larger and smaller percentage of BHP separations for defence expenditure financing, which depends on the politics they perform, aims and tasks of the defence system.[1]
Tax imposing growth has its upper limit, so it happens that tax incomes decrease regardless to tax payment increase. Economy subjects change their attitude towards to tax payment. Namely, at moderate tax rates it is not profitable not to pay taxes as legal punishments are larger than thus made saving. But, at high tax rates, tax evasion becomes profitable and so comes to tax income decrease, so called *tax evasion.*
Review of public income payment in Serbia in 1999., 2003. and 2006. is given in Table 3 [7].

Table 3: Public income payment stated in thousands of dinars
(***Source:*** *Statistic yearbook: 1997., 2000., 2004. and 2007.*)

Years / Income	1999.		2003.		2006.	
	Thousand din..	(%)	**Thousand din.**	(%)	**Thousand din.**	(%)
Tax on production and service income	13.796.950	18,69	130.953.000	23,58	229.512.000	22,41
Tax on profit and revenue	8.590.873	11,64	82.400.000	14,84	137.364.000	13,41
Tax on property	925.484	1,25	13.204.000	2,38	18.372.000	1,79
Tax on assize	1.357.177	1,84	57.990.000	10,44	86.833.000	8,48
Custom	4.234.090	5,74	29.237.000	5,26	45.267.000	4,42
Other public income	7.098.912	9,62	24.540.000	4,42	123.322.000	12,04
Other public income	9.913.053	13,43	27.485.000	4,95	72.080.000	7,04
Income organ of social security	27.822.484	37,69	143.955.000	25,92	267.891.000	26,16
Public funds income	69.855	0,09	33.460.000	6,02	23.005.000	2,25
TOTAL	**73.808.878**	**100,00**	**555.294.000**	**100,00**	**1.024.131.000**	**100,00**

In 1999 public income amounted to 73,8 billions of dinars, while in 2003. it came to multiple increase of public income (7,5 times more than in 2003.)so that total amount was 555,3 billions of dinars). Payment collection of public income continues to grow in the following period, so in 2006. public income amount is 1.024,1 billions of dinars.
When we speak about public income, they still have important participation in total society income separation (45%-50%). In the following period it would be necessary to decrease them for purposes of further economy growth which would make assumptions, in the end, for nominal increase of public consumption, and with this means for country defence.

1.2. Other means of defence expenditure financing

Other sources of defence expenditure financing include: Incomes, credits, loans etc. In the Republic of Serbia other sources of defence expenditure financing include:
- *Master Plan Income* [10], by selling assets used in defence system which are not necessary for defence system to function. This finance source was introduced as support of defence system reforms and material state improvement of the members of the defence system;
- *National Investment Plan Means* [11] are income realized in privatization procedure and from the other sources which are by plan given to budget users for certain projects realization and
- *Donations and help*, income from home and abroad people and institutions.

Other sources of defence expenditure financing in 2007. are increased in comparison to 2006., but their participation in total expenditure financing is very small. In the following period in defence system we expect participation increase of other resources of defence expenditure funding, especially from *Master Plan and National Investment Plan.*

[1]Percentage of BHP separatons for defence expenditure financing in 2005 was: Hungary 1,6%; Romania 2,1%; Bulgaria 2,4%; Albania 1,3%; Bosnia and Herzegovina 2,0% Croatia 1,8%; Slovenia 1,6%; Greece 3.1%; Italy 1,7%. Data source - The Millitary Balance 2005. - 2006.

2.3. Budget System

Budget system enables financing state functions financing out of the state budget, and thus it depends on socially-economic relationships and aims which a state wants to achieve in budget consumption politics. Budget system is based on defined principles, preparation, suggestions, agreements, performances and budget controls as elements of budget system.

By the Constitution of the Republic of Serbia [21], it is defined that rights and obligations financing of the Republic is done out of the budget, and budget income come from the taxes and other income defined by law. In the beginning of 2002. Law on budget system of the Republic of Serbia was adopted [11], which replaced Law on public income and public expenditure in some regulations.

3. BUDGET AS AN INSTRUMENT OF DEFENCE EXPENDITURE FINANCING

Budget is a basic instrument for public expenditure of the state financing, including defence expenditure which is defined by defence document. According to adopted strategy of defence, state budget is defined as basic instrument for defence expenditure financing [19]. Budget as an assumption, for defence expenditure financing includes: 1) Income and expenditure of the budget, 2) Budget making procedure, 3) Budget structure by expenditure categories 4) Budget execution and 5) Budget execution control

3.1. Public income and public expenditure

Each budget has its income and expenditure. Structure of income and expenditure is regulated by law. According to budget System Law of the Republic of Serbia, budget income and expenditure structure was precisely defined [11]. Projected structure of public income and expenditure of the Republic of Serbia for the period 2009. to 2011. is shown in Tables 4. and 5.

Table 4: Consolidated public income of the Republic of Serbia (in % from BHP)
(***Source***: *Ministry of Finance of the Republic of Serbia [18]*)

Serial n°	**INCOME TITLE**	**2009.**	**2010.**	***2011.***
1.	TAX INCOME	36,8	36,6	*36,5*
1.1.	Custom	2,0	1,6	*1,3*
1.2.	Citizen revenue tax	4,9	4,9	*4,9*
1.3.	Enterprise profit tax	1,6	1,7	*1,8*
1.4.	PDV	11,3	11,3	*11,3*
1.5.	Akcizes	4,1	4,2	*4,3*
1.6.	Private property tax	0,7	0,7	*0,7*
1.7.	Other tax income	0,6	0,6	*0,6*
1.8.	Social security fee	11,6	11,6	*11,6*
2.	NONTAXABLE INCOME	4,8	4,8	*4,8*
3.	CAPITAL INCOME	0,6	0,6	*0,6*
TOTAL INCOME		***42,2***	***42,0***	***41,9***

Table 5: Consolidated public expenditure of the Republic of Serbia (in % from BHP)
(***Source***: *Ministry of Finance of the Republic of Serbia [18]*)

Serial n°.	**EXPENDITURE TITLE**	**2009.**	**2010.**	***2011.***
1.	**TOTAL EXPENDITURE**	**44,3**	**42,9**	***42,0***
2.	Employee expenditure	9,8	9,3	*9,1*
3.	Buying goods and services	6,7	6,2	*5,8*
4.	Interest rare payoff	0,7	0,9	*1,0*
5.	Subventions	2,6	2,4	*2,4*
6.	Social welfare and citizen transfers	18,5	18,1	*17,7*
7.	Other present expenditure	0,9	0,9	*0,9*
2	Capital expenditure	4,3	4,5	*4,6*
8.	*Budget loans Nett*	*0,7*	*0,6*	*0,6*

Based on projected income *(Table 4)* and expenditure *(Table 5)*, one can see that in the one can see that in the period from 2009. and 2011. a deficit was planned.
If there is a budget deficit, as it is the case for the analysed period then, most often, total planned budget of the state and its direct users with the defence system included cannot be realized completely, so that unfinished part of planned tasks is left during the year.
Table 6 shows data on defence separations in European states in 2005.

Table 6: Defence expenditure review in some European countries in 2005.

Country	Defence expenditure (in billions of Euros)	Defence expenditure as a BHP percentage	Number of soldiers
Austria	2,16	0,88	35.471
Check Republic	1,84	1,86	24.711
France	42,53	2,49	351.136
Greece	4,96	2,75	139.809
The Netherlands	7,69	1,53	48.186
Italy	26,96	1,90	324.984
Ireland	0,92	0,57	10.500
Cypress	0,30	2,21	15.322
Lithuania	0,24	1,23	11.526
Hungary	1,26	1,44	24.507
Germany	30,60	1,36	245.700
Poland	4,46	1,90	150.000
Slovakia	0,67	1,77	14.095
Slovenia	0,41	1,49	6.644
Spain	10,50	1,16	119.832
United kingdom	44,20	2,47	204.500

When we speak about budget expenses or military budgets we have an interesting situation. According to statistic data of AFP and SIPRI from 2005. military budgets spend between 0,24 billions of Euros in Lithuania and 44,20 billions of Euros in United Kingdom (France 42,53 bill.€; Germany 30,60 bill. €; Italy 26,96; bill. €, etc.) This deals with enormous amounts which burden national economies and their budgets, which makes inflation, unemployment, budget deficit, public debt with reversible effects on economic growth and private savings. In this situation there is growing unemployment and growing public debt stated, and apart from relatively successful inflation control and budget deficit decrease.
However counterproductive might armament area be, as today it is spent for arms more than for basic human needs, the fact is that this helped IT development. Military organizations of developed countries are the initiator in starting technological innovations, as high expenses of semiconductors, structures and substructures decreased American military industry efficacy.
Breakthroughs in these areas including nuclear energy brought to development of other sectors of economy as in national so in global level. Thus the flow was reversed, and today the accent is on development of those techniques and technologies which will improve economic growth of the country, which means enabling higher possibilities for means separation for arming and military equipment. It is about IT and Internet, development first of all, or computer softwares so that more efficient means can be produced.
In the context of the previous attitude it is clear that arms and military equipment expenditure are permanently increased. Their increase is often influenced by isolated events. For example what happened on September the 11th, 2001. in America provoked higher separation of means for military budget and arming American army. But means expenditure is also influenced by tradition or the attitude of the society towards defence. So on average, Americans spend 100% more for defence than Europe [9]. America often increases means for defence and arming burdening social welfare.

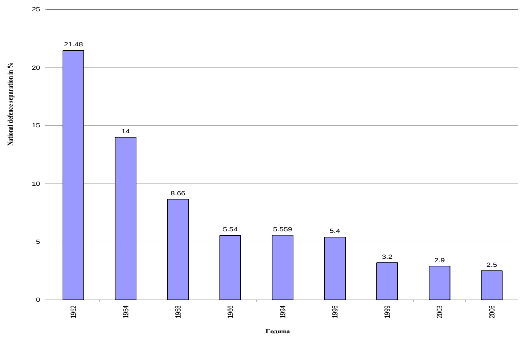

Figure 1: National income separation for defence in Yugoslavia and Serbia

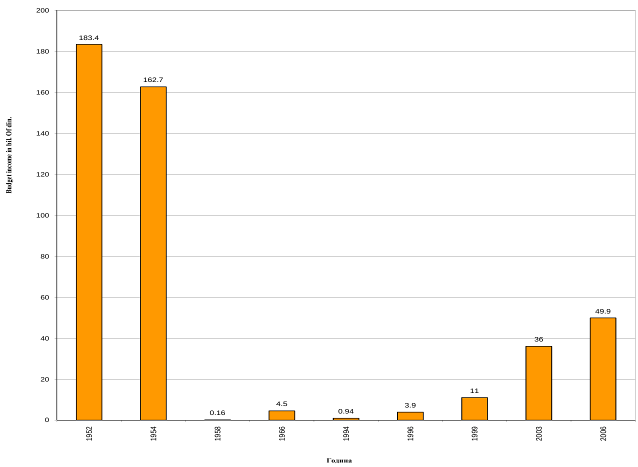

Figure 2: Nominal separation for defence in Yugoslavia and Serbia

Since the end of the Second World War, Yugoslavia, from that period separated significant means for defence. In ***Figures 1 and 2*** characteristic years were shown: 1952., 1954., 1958., 1966., 1994., 1996., 1999., 2003. and 2006. Based on ***Figure 1*** we may conclude that percentage of separation for defence was continually decreased, while ***Figure 2*** shows data after year 2000. when it came to increase of financial funding (in nominal amount) given for defence.

In 1998. Funds for military needs were 4,97% from total social product so that military expenditure per a citizen were 78 dollars, which is significantly less comparing to countries with (then) close number of population: Greece - 333, Belgium - 327, Check Republic - 125 dollars a citizen.

3.2. Defence budget structure by categories of expenditure

In the system of defence of the Republic of Serbia all the expenditures of defence were put into three categories as follows:[2]
1) Personal expenditure;
2) Operative expenditure and
3) Investment expenditure.

Defence budget structure, by expenditure categories speaks of the central point of defence financing. In *Table 7* defence budget structure of the Republic of Serbia was shown for the period from 2001. to 2007. by expenditure categories.

Table 7: Defence budget structure of the Republic of Serbia by expenditure categories [6]

Expenditure category	***Percentage of participation by years***						
	2001.	**2002.**	**2003.**	**2004.**	**2005.**	**2006.**	***2007.***
Personal expenditure	50,50	52,48	55,09	68,94	71,51	68,59	*68,70*
Operative expenditure	40,87	29,00	27,76	23,56	21,86	24,56	*24,30*
Investment expenditure	8,63	18,52	17,15	7,50	6,63	6,85	*7,00*
Total expenditure	***100,00***	***100,00***	***100,00***	***100,00***	***100,00***	***100,00***	***100,00***

In the analysed period it came to important increase of *personal expenditure category (wages and military pensions)* from 50,50% which was the number in 2001. to 68,70% in 2007. At the same time and during the same period there came to considerable decrease of *investment expenditure category* in the total defence budget from 18,52% in 2002. to 7,00% in 2007. *These data show that The Republic of Serbia defence system does not have enough money to finance investment expenditure.*

With NATO countries the percentage of *personal expenditure* in the total defence budget is at most to 55%,which is significantly less than our participation into defence budget. Likewise, *investment expenditure* in total defence budget of the NATO member countries participate with at least from 16% and more. (*Table 8*), which is significantly more than our defence budget.

Table 8: Defence budget structure of the NATO countries by expenditure categories
(***Source:*** *Management for strategic planning MO*)

Expenditure category	***Percentage of participation by NATO country***			
	NATO Neighbouring countries	**NATO Europe**	**NATO North America**	***NATO***
Personal expenditure	54	56	40	*55*
Operative expenditure	30	24	38	*25*
Investment expenditure	16	20	22	*20*
Total expenditure	***100,00***	***100,00***	***100,00***	***100,00***

Defence budget structure by categories of expenditure, *is important for our country membership into Partnership for Peace or NATO Alliance.* Countries candidates for membership and members of the alliance must strive to achieve defence budget structures by expenditure categories which NATO countries have.

3.3. Logistic expenses in defence system

By title "Present functioning –logistics" importance of logistic expenses is pinpointed in defence system and thus defined that they are vital for system functioning, as first of all they enable system integrity, make and keep interconnections of the system parts, enabling at the same time energents (fuel, oil, electric energy, heating, etc.),movable stuff, spare parts, food and disposable material and creating conditions for living and working.

According to the data of CSCMP (Council of Supply Chain Management Professionals) expenses of logistics of all enterprises, analysed through their participation in GDP decreased during decades until last year when it came to slight percentual but high absolute increase of the expenses. In 1963. Participation of the logistic expenses in GDP in USA was around 25%, in 1980. It decreased to around 18%, in 2004. The percentage was the lowest

[2] Draft of Strategic Defence Review, MO, n° 31/08.

8,8%, so that last year's participation of logistic expenses increased to 15,2% comparing to 2004 that is an absolute increase for 156 bill.$, while relative participation is logistic expense participation in GDP in 2007.was 9,5%.
In previously mentioned large exporting countries where logistic structure is not developed enough logistic expenditure participation on macro level is still considerable high, (for example: China 22,3%, India 17%). On the other hand European Union as a territorially close union of countries which trade a lot among each other and which mostly have good and well developed logistic infrastructure, have parentally the lowest participation in logistic expenditure in GDP – only 7,15% (average data refer to 2004.).

Table 9: Logistic expenditure of Serbian Army

Expenditure title	1999.	2003.	2005.	2006.
Paying in kind		61	152,1	153,4
Regular expenditure	797,62	1.908	1.853,10	2.867,70
Current mending and maintaining	2.859,35	1.509	1.095,70	1.191,40
Material	1.626,58	5.500	3.141.9	3.131,50
Taxes, obligation taxes and punishments		341	7,4	13,8
Buildings and construction objects	650	4.206	1.067.5	1.195,30
TOTAL	**13.525**	**13.525**	**7.317,70**	**8.553,10**

Participation of logistic expenditure in total allowed means of R. Serbia budget for financing defence has a following trend:
- in 1999. amounted **53,76%** out of total budget**,**
- in 2003. amounted **37,35%** out of total defence budget**,**
- in 2005. A drastic decrease in participation percentage was seen (practically half of the previous), so it amounted **16,93%** out of total defence budget**,**
- in 2006. A significant growth was noticed, comparing to the previous year, so the percentage was **17,14%** out of total defence budget**,**

By expenditure realizations in general logistics activities, adequate conditions for nourishment, clothing and lodging are enabled. We should pinpoint that this includes expenses for energetic services (electric power, central heating, heating material, etc.), public works services (water, waste disposal, etc.), administrative (disposable) material, agricultural material, housekeeping and restaurant keeping material (where among other things food for people belongs).

3.3.1. Nourishing expenses in total expenditure of the Army

Table 10: Social product, public expenditure, budget and defence budget
(*Source: - for columns 2 to 6 data Development and economic policy Office, for columns 7 - 10 MO*)

BNI				Public expenditure in Serbia		R. Serbia budget		Defence budget	
Year	Billions of dinars	Billions of USD	Official dollar course	Billions of dinars	Billions of USD	Billions of dinars	Billions of USD	Billions of dinars	Billions of USD
1	2	3	4	5	6	7	8	9	10
2003.	1.171,646	20,347	57,58	485,3	8,428	276,8	4,807	36,217	0,629
2006.	2.125,898	31,662	67,14	811,79	12,091	468,8	6,982	49,905	0,743

Means allowed for Army needs are limited by the budget of Serbia. Based on data shown in *Table 10 it is obvious* that means separated for public expenditure in the period 50% of total social product, which significantly slower economic development down.
Apart from the large participation in total social product, by means which were manipulated by the Army were not enough for planned aims realization. Situation is significantly complexed by economic war measures strain, especially military intervention of NATO [5].

Table 11: Price of cost, expenditure for food per a soldier and total cost for food

year	Price of cost for food		Yearly food price per a soldier		Spent for feeding Military	
	(din)	USD	(din)	USD	(din)	USD
2003.	190,93	3,31	69.689	1.208,15	3.285.943.742	57.067.449
2006.	250,00	3,72	91.250	1.357,80	1.692.572.171	29.395.140

Based on *Table 11* price of cost of the military members increased from 190 dinars in 2003. to 250 dinars in 2006. But at the same time when we observe the price in United States dollars the price decreased from 4,09 in 1996. to 3,72 in 2006. which analogly reflected yearly cost of food per a soldier and total Military expenditure?

3.4. Defence budget performance

Defence budget performance represents an important process in budget business. Budget is brought to be performed. Budget performance implies spending means for certain purposes and needs, which are regulated by budget system law (*Budget System Law, Article* 31. – 50 [11]).
For budget performance allowances (done monthly at allowed rates, allowed by the Ministry of finance of the Republic of Serbia) government is responsible, and for lawful usage of means of direct budget users an official organ of budget user is responsible or public management organs. Considering functions they do, persons responsible for budget performance are divided to order givers and bookkeepers, and because of specific work they do, *these functions are separated from one another.*

Table 12: Percentage of budget performance and amount of obligations transferred (Budget and Finance Management)

TITLE	***Percentage of defence budget performance***						
	Amount of obligations transferred in millions of dinars						
	2001.	**2002.**	**2003.**	**2004.**	**2005.**	**2006.**	***2007.***
Budget performance	100,00	100,00	87,10	99,40	99,90	96,10	*96,54*
Transferred obligations	*3.142*	*2.517*	*2.767*	*4.073*	*4.568*	*1.116*	*0,00*

By budget system Law in the Republic of Serbia, unused means in the current year cannot be transferred into the next year. The same is the case with all the surrounding countries. But, with developed countries (USA, Germany and others), unused means by budget can be transferred into the next year.

3.5. Defence budget performance control

To ensure budget performance, in a way planned and allowed by law making organs, in all modern countries control and revision of budget performance is organized. (Article 66. – 71. *Law on budget system,* n. 9/02, and 86/06 [11]). Defence budget control is performed in the process of budget performance of the Republic of Serbia, as to include all the organs in budget performance and all the phases through which public income means go through, and by that defence system. Realization of control in itself depends on [1]: performance time, control organ and control content.
Defence budget control improves financial discipline, law obedience and purposeful usage of defence budget means.

4. WAYS OF DEFINING MEANS FOR DEFENCE FINANCING

Defence needs are financed from realized BNI (brutt national income), state budget, as basic instrument for financing needs. To enable reality in planning, programming and budgeting of defence expenditure, it is necessary to define means for financing previously mentioned.
Height of the amounts of planned period depends on: projected height and growth of BNI, projected inflation and projected separation for defence expenditure needs.

Defined means for defence expenditure (planning), represent basic assumption for programming and budgeting of defence expenditure.

5. CONCLUSION

For financing defence expenditure almost all counties of the world and especially developed, separate considerable financial funds. The amount of the funds is defined by defence politics, surrounding state and economic power of the country.
Financing defence expenditure includes sources and methods of gathering funds for fulfilling needs of the country as well as bearers of the actions of gathering and using of funds. Starting from the fact that country defence is a segment of total socially economic structure, it is inevitable that financing defence funds must come from the same source as financing public expenditure.
Total public expenditure, is mostly financed from achieved BNI which is shown in the state budget, as a basic instrument for society needs financing, so the budget is basic instrument for defence expenditure financing.
Public sector limitations, tax decreases and regulative economic function of the state should ensure a larger space for private capital and private initiative. Decrease in military expenditure would enable allocation of funds for certain social programmes, public infrastructure, education, research and development, with a note that military expenditure does not overcome funds expenditure in public enterprises necessary for set aims realization.
By enabling more money for social welfare, research and similar and not endangering defence systems functions is possible by introducing IT, by which softwares would enable decrease of living labour and at the same time improve efficacy and efficiency.

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MODERN APPROACH TO KNOWLEDGE MANAGEMENT-CONDITION FOR MAESTRAL MANAGEMENT

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Summary: *The In the world of turbulent changes intuition has been replaced by the scientific approach in achieving top results such as those that we call champions that is maestros. Thanks to the science the world created more technical, technological and other innovations in the last fifty years than in the whole human history.*
The techniques represent the innovations in science management those that concern creation and implementation of ideas as the source of maestral management, those that improve the design of organizational structure by reorganizing or reengineering, those that concern the application of the best practice of organization and management in the world, those that concern creation of reliable organizations in production and service sectors, or finding optimal solutions in resources' spending and achieving set goals in other words effects.

Keywords: *maestral management, innovations, organization, resources.*

1. INTRODUCTION

Instead of classical, successful company's today use modern, that is, "rugby" approaches in knowledge management. In such approach collective knowledge and intellect go through the whole system as a totality, passing the ball to the co-players. This approach already represents important competitive advantage in knowledge management.
Rugby approach arises from the constant interaction between well-chosen teams from different knowledge areas, whose members work together on an idea from the very beginning to the end. Collective intellect doesn't go through strictly issued phases but through the process of joint work and mutual interaction, as shown on the following picture:

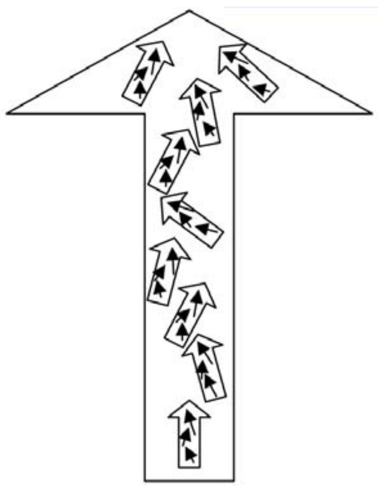

Figure 1: Rugby system

2. COMPARING SEQUENTIAL AND MODERN APPROACH OF KNOWLEDGE AND INFORMATION MANAGEMENT QUALITY

Modern approach goes from linear and partial to integral and universal. It encourages different and very often uncertain attempts, until it reaches the top-quality idea and status quo. It also stimulates learning and thinking on different levels and functional areas of an organization. Modern approach encourages changes through mutual and simultaneous interactions of different knowledge and fields. Finally it reaches higher efficiency and effect because the energy this approach produces has multiple influence through the depth of the whole organization. This way the monotony is avoided and all employees think of improving their work and tasks by using collective intellect and intelligence.

Modern management approach is today used by the most successful companies in the world such as: 3M, Xerox, Honda, NEC, EPSON, Broteher, Hewlett and Packard. It is also in the phase of introduction in other world companies and it will for sure represent the base philosophy in management in the future. In the broader sense, modern or rugby system of observing phenomena, processes and objects is natural and logical because people are not born to live isolated. It is necessary for a man to belong to someone or something.

Only where there is mutuality and mutual connectivity there will exist the situation in which the people will be ready to give away the part of themselves to gain the part and well-being of the others.

Companies that apply rugby system in knowledge management. Between all these companies there is a red line that connects them more or less even though they belong to various industries (automobile, computer, digital industry) and various cultural and sociological areas (USA and Japan). Leading companies show four characteristics in knowledge management:

- built-in instability,
- collective knowledge self organization,
- learning through more levels,
- organizational knowledge transfer.

The four mentioned characteristics should not be treated partially, in other words, they should be treated holistically, as a big puzzle. Taken individually, each mentioned element does not result in speed, nor the flexibility. They altogether, as a totality, produce new dynamics and intensity that improve the development of an organization.

3. BUILT-IN INSTABILITY

Successful companies count on the instability for which the adaptable organization should be created, that is, the one that will automatically react to the changes in the area. For that matter strategic management starts from creating a wide field of influence or from some strategic trend, on the level of totality. It rarely gives strictly determined concept or special and precise plan of action. Organizational teams have great freedom in problem solving but challenging goals are set for them. For example, Xerox's top management wanted organizational teams to project prestige machine, that will according to all performances be different from all existing ones and of higher quality from the competitors' ones. Top management determined the period of two years for the team FX 3500 to design the mentioned copy machine that will also be double cheaper than similar types of machines of other producers.

The team got the complete freedom in fulfilling and completing the mentioned task. The team included experts from various areas and various subjects including users, repairmen and so on.

Team work was intensively used in "Honda". One of its development vice presidents said: "That is as we have put the members of a team on the second floor, moved ladder, and told them they won't get the ladder until the task is finished. They could decide to jump, but the consequences would be great. He believes that creativity appears when collective knowledge (teams) gets the goal, time and freedom to work.

Project teams often work according to principles of creative and highly organized chaos. They have the freedom to choose the way they will work and often the time when they will work in other words they get rid of technical-technological regime that is very often obstacle to creativity".

Collective knowledge self organization. Collective knowledge and intellect are best organized through project teams. In an organization that is permanently learning they have to selforganize because the previous knowledge they have cannot be applied to new situations, problems and processes. At the beginning project teams start working the same way as any other company does at its start, that is, they take risk and initiative and develop their program further improving their concept and philosophy of practice.

Team selforganization produces the unique dynamics and rhythm. The capability of selforganization is estimated according to three main criteria: autonomy, selfcompetition and cross-fertilization.

Autonomy is the base condition for selforganization. Here there are no formalizations and restrictions set by the top management. The team is free to set its own direction of action. Such a selforganization had the IBM team

when developing personal computer. Top management of this company let the team work on their own. Above all, the team was allowed to choose suppliers for computers and microprocessors on their own. The similar thing did Honda. Its team got the task to make a car for young people. The team consisted young engineers who were permitted to work on their own.
Selfcompetition is rising above the average. Teams start work with the basic directives from the top management, afterwards setting their own goals that through the project become bigger and more advanced. Teams compete and strive to surpass themselves in speed or efficiency in reaching the goal.
While the selfcompetition is positive and welcomed it is not allowed to individuals from one team to compete between each other. Individual running for goals is harmful and less efficient. Here, the crucial roles have the team leaders who direct individual knowledge and abilities to collective channel that leads to reaching the goal.
Cross fertilization is, in fact, mutual advanced training and learning. The team composed of multidisciplinary experts improves and develops itself through mutual interactions. Honda's team was, for example, composed of experts from different fields: technical, commercial, designer etc. However, they were of different age, different work experience, from theoretician to practitioners etc. Such a diversity created new ideas and knowledge, that is natural because diversity always has bigger efficiency and effect than uniformity.

4. LEARNING THROUGH DIFFERENT LEVELS

Learning through an organization can be achieved different ways. Individual learning is when the top management encourages its employees to take a part of their time for fulfilling their own dream. Canon uses collective pressure on individuals to permanently learn. It starts here from the attitude that leaning and education of an individual is not his/her private thing, but the need of each company. In the company 3M they practice learning from experience, going to shops and watching how sales staff work. From this observation new ideas bloom and they are of high quality and very profitable.
For holistic approach in knowledge management it is very important to know the spirit of the organization that is learning. Organization learns through individuals that learn. Without it the company cannot learn. Iazuo Inamori, the president and founder of ceramics technology says about above mentioned: "Whether it is about the research and development or management the active power the company relies on is its people. People have their own will, intellect and way of thinking. If employees are not motivated enough to face the growth and technological development of the company there will be no growth, no development, no company life…".
However it does not mean that the company learns if its employees learn. The emphasis here is on collectivity that is organization.
Learning on group level. Group learning and group work is present and welcomed in all world successful companies. At one time, the founder of Serbian "Jumko" from Vranje Branko Golubovic, sent people abroad with remark: "Go, see, come back and apply the seen." The similar thing did Honda. When it came to the dead end of the development of its own concept, its management sent the team to Europe to observe how they did it in Europe. There started the idea of a small car that was very popular on automobile market as a completely opposite reflection to big cars that at that time dominated the business philosophy of Europe.
Learning in the company. The most important learning of modern business management is that that takes place in a company. Many companies do not even live for forty years on average because they do not adapt to outer environment and do not learn.
Learning in a company has its best results if the program of learning is made for the company as a whole. It is also very important to make the programs concerning the levels and functions in the company and even throughout the whole year. Programs must not burden the employees but freshen them up. The Xerox company practices this way of working.
Xerox achieved special results through corporate learning in reaching TQM. The aim of this learning was to improve quality, productivity, market orientation and profitability.
Companies often apply some other ways of learning. Hewlett-Packard hires academicians, counselors and some experts that teach employees market orientation. This company also applies group conversations, market research and marketing testing. With the help of these ways of learning and increasing intellectual power the company achieved remarkable results in comparison with its competition.
Multifunctional learning takes place on different functional levels of the company. Multidisciplinary experts join the teams even those experts that do not have direct connections with the given task. For instance, the team that worked on PC 8000 in NEC consisted of business administrators. Business team in Marks and Spencer include: technologist, selector and business administrator. That is the winning combination in this big retail chain.
These mentioned examples show how important is learning for the company. Such a program boosts initiative and will for learning. It also makes the changes more qualitative which are the condition for survival, growth and development of companies as well as their individuals. This is logical because the one that does not learn he lags and endangers his survival.

5. KNOWLEDGE TRANSFER

The aspiration to accumulate individual and company knowledge is just one aspect of learning. However, the practice shows that individuals and companies tend to transfer their knowledge outside themselves, that is called knowledge transfer. That often happens without the consciousness of it. Analogy happened many times in business, in other words, people move good experiences to other organizational units or to other projects that is phases in their completion. This usually becomes reality by including previous operators into organizational units where the knowledge should be applied.

We can also transfer knowledge by making it a standard. This is logical because companies tend to institutionalize past experience. In the production of Auto Boy Canon produced one type that was later used in other projects. IBM tries to imitate personal computer development project that was carried out in thirteen months with foreign help.

Knowledge institutionalization can be counterproductive especially if it is exaggerated. Wisdom and experience transfer and standard practice establishing is good if the environment is stable. However, in the times of turbulent economy past experience can be impractical and counterproductive because new times need new solutions and new people. For that reason, companies give their project teams tasks to develop, for example, a new product so that it has 40% of existing performances.

The introduction of the third generation of Civic model in Honda was followed by elimination of old spare parts and introduction of completely new parts. When the new model was promoted next to it lied the old parts. That car was the car of the year 1994.

6. CONCLUSION

While the traditional knowledge management has expert knowledge as primary one, rugby approach emphasizes the group, where in solving problems inexperts often participate. Inexperts are not burdened by expert, scientific or other knowledge so they are capable of improvised, logical and innovative way of thinking. Their questions often tempt experts.

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THE INFLUENCE OF LEADER ON TEAMWORK EFFICIENCY

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Summary: *Being an issue of ever-growing attention, leadership has become important factor in all successful organizations. New generation of leaders is facing the challenge of how to create and operate such organizations where all individuals can realize their full potential with the feeling of being valuable and important for the organization. This, above all, asks for a vision that shuld be launched by the leader, approved and accepted by his staff willing to carry it out wholeheartedly. Many managers find it challenging to learn and master the skills important for becoming a team leader. Most modern organizations have realized that in order to improve profitability they have to create an efficient team, where leaders play a very important role.*

Keywords: *leader, leadership, organization, vizion, efficient team*

1. FUNCTION AND IMPORTANCE OF LEADERS

There is always a question why some managers suceed in what they are doing and others don't, or why a well-qualified manager cannot achieve the expected results in new circumstances. The answer to this question, experts believe, doesn't lie in intellectual capacity or the knowledge of a manager, but in his leadership potentials. P. Drucker claims that he met many successful leaders in the course of his long-lasting professional career. 'They were all different from each other. Some of them would leave their offices, while others always kept indoors. Some were exquisitely affable (not many, though), while others were stiff and reserved. Some were impulsive, while others needed ages of diligent thinking to come to a decision. Some would start talking about their families right away, while others stuck strictly to business. Some were attentive listeners, but there were also those who strictly followed their own instincts.'

This all proves the claim that some authentic leadership style actually doesn't exist. Still, they all had one personal characteristic in common – they had either very little or no 'charisma' at all. They were not 'born' leaders, but they became ones owing to successful and thoughtful work.

However, they all knew four simple things:

1. Only a person with followers can become a leader. Therefore they attached considerable importance to the people who followed them.
2. You do not have to be loved or admired in order to be a successful leader. Successful are only the leaders whose followers do the right things (efficiency). Results, rather than popularity underlie true leadership.
3. Each step of a leader is carefully watched. Therefore they have to set an example.
4. Position, title, privileges or money do not make leadership. Leadership, above all, means responsibility.

Becoming an efficient team leader presents a challenge for many managers. One should master skills such as being patient in presenting information, being trustful to the others, disclaiming the role of authority and being capable of stepping in at the right moment. Team leader should pay attention to the following two priorities: managing external limitations affecting the team and facilitating the team process. These priorities include four specific roles of a leader, presented in Figure 1 below.

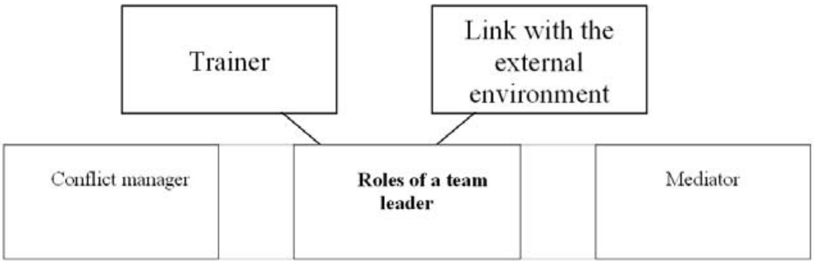

Figure 1: Roles of a team leader

First, team leaders present *link with the external environment*. The point is that the information is gathered from the environment and then exchanged within the team.
Second, team leaders are *mediators*. It means that if a problem occurs the team ask their leader for help. If this be the case the leader helps the team by asking overt and core questions, on the grounds of which the team discuss the problems and give necessary resources in order to solve them.
Third, leaders are *conflict managers.*When a conflict occurs, leaders are those who help identifying the both the reason and possible solutions to the conflict and try to reduce conflict within the team to the smallest possible degree.
Four, team leaders are *teachers.* In order to keep high-quality performance, team members need leaders to teach them and do all that is necessary to help the team.

2. TEAMWORK CHARACTERISTICS

As a social being, man lives and works within a group, often within a team. There are numerous definitions of the team phenomenon, but we can say that a team comprises a group of people entitled and selected to solve certain typically complex problem, discuss certain question or suggest optimal way to solve it, or if possible, solve it themselves, using their best judgment.
A team has to be well organized and maintained as long as it exists. It is our inherent characteristic to put the greatest effort when doing important and responsible work. If the goal is set on a high hierarchical level, it is natural for team members to be as creative and persistent as possible, constantly motivating each other to gain that goal as quickly and efficiently as possible. When the goal is gained, they do not stick to it, since there is always a new one with its specific purpose showing that the limits of human achievements are constantly being pushed forward.
Regardless of the fact that success is a subjective phenomenon, there are indisputably some characteristics typical of successful and energetic teams,

- Clear and highly-set goal
- Trustful and supportive environment
- High standards and shared responsibility
- Team building
- Fast decision making

Clear and highly-set goal. It is of crucial importance to set a goal, because if you do not know your goal, it is not possible to reach it. Therefore, the first and foremost thing a leader, and his team, should do is – to set a goal. It is simply not possible to be successful without a goal. Goals have to be set high. Teams have to work only on highly set tasks.
Trust. Setting clear and high goals enables teams to find the direction that will lead them to the solution of a problem, or suggesting ideas for solving it. All of that is based on trust, which is hard to gain, but easy to lose. Highly successful are only the teams that can be trusted, either by the management that built them, or among their members individually. Trust is based on the following four elements: responsibility, support, truth and energy. These elements imply the indisputable fact that each member of a team has to be responsible for his/her actions. They have to support each other, tell the truth to each other and put their own capabilities and actions at disposal of the team in order to achieve synergetic effect.
High standards and shared responsibility. One more thing is characteristic of highly successful teams - the ability to set high standards and take responsibility for their operability. When people have some important business to do, they usually stick to high standards. Creative environment usually stimulates and encourages individuals to set the standards and responsibilities, making it clear that they are not alone in their ideas and

actions, encouraging them to take the risk regardless of possible ensuing mistakes. Above all, leaders have to know how to get the best out of each individual.
Team building. Teams should be built only when a complex problem exists, or when we want to find the best possible solution to a particular problem or dilemma. It is not enough to simply form a team. It is much more important to build the team up, trying to create team spirit and unity. This ultimately leads to better work efficiency, or in other words - better results, with less effort. And that is what all members of a company, or team, want to achieve.
Fast decision making. Team decision making enables not only better decisions, but faster realization as well. Team decision is always more easily accepted, because it is thought to be more competent. Team decision making is carried out both by participation of the team members and by consensus. Consensus is a process of shared decision making.

3. MODEL FOR CREATING AN EFFICIENT TEAM

Many modern organizations tend to base their business on teamwork. The problems resulting from such attempts force them to ask themselves why some teams are successful, and some are not. That is the reason why some organizations try to get to the very core of team efficiency.
Team efficiency depends on the degree of achieving four kinds of performance:
1. Innovation / adaptation – it is essential for a team to adequately react to all the changes in its environment.
2. Team efficiency – represents successful achievement of all the goals that have been set by using the available resources in the best possible way.
3. Quality – shows the team ability to achieve certain results using available resources in a successful way and meeting the consumers' needs at the same time.
4. Satisfied employees – ability of a team to motivate employees to voluntarily assume their obligations and to stimulate their enthusiasm by satisfying the needs of team members.
Team creation poses a very complex task in front of a leader, so we shall try to point out some skills necessary for creating efficient teams. In the early 1990's, experts from the Creative Leadership Centre, San Francisco created TELM - Team Effestiveness Leadership Model. TELM model should first help leaders identify the team's needs, and then direct them to the best ways to follow in order to build and manage highly effective teams. A simplified version of this model is presented in Figure 2.

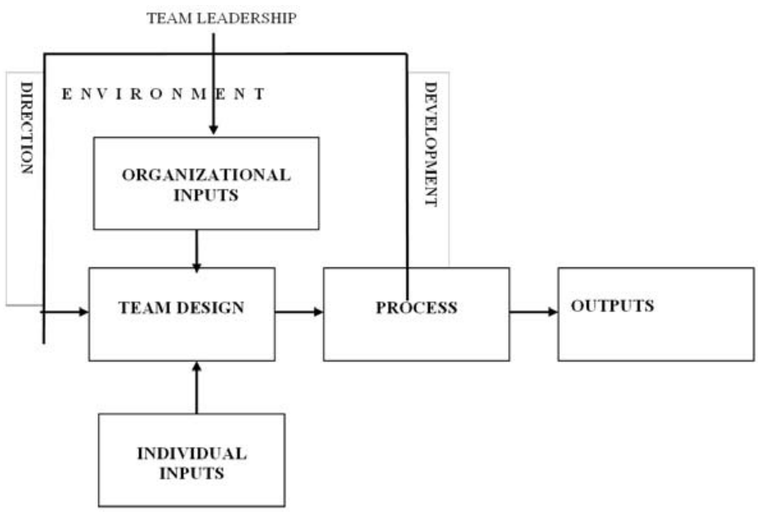

Figure 2: Simplified TELM model

The figure presents variables of the model: inputs, process and outputs. At the same time it also shows three basic functions critical for efficient team leadership:
- Direction
- Design and
- Team development

Inputs present all resources available to a team in order to achieve their goals.

Another area that should be considered by a leader is the quality of the team process. It is the leader who should monitor the performance of specific problems preventing any possible problems that may occur till the end of the process. Since assessment represents such an important process in becoming an efficient leader, it is crucial to know at least four efficiency criteria. According to these criteria we envisage the best possible ways for teamwork. In order to be efficient, a team has to:

1. Work hard enough
2. Have knowledge and skills necessary for do the task up to the end.
3. Use adequate strategy
4. Have a constructive and positive group dynamics

Outputs, or the results of a team are the reasons why it was created, but activities of team leaders also play important role. It is already mentioned that one of the most important roles of team leaders is defining the direction. Leaders must have a vision of how to find the best direction for the team. Not only do they have to find adequate type of team and skills necessary for carrying out a task, but also to select individuals that are to comprise that team. Second important function a team leader has to perform is designing a team. This part of the task is extremely complex and demanding for a leader. It is necessary not only to determine type, size, and specific roles within a team, but also the skills and knowledge the potential members of a team should possess.

Team development is the third function of a team leader. It is upon the leader to find a new way to upgrade the already well designed team.

In conclusion we can only say that TELM model represents a solid underpinning for the leaders to build up efficient teams.

4. CONCLUSION

Being a leader is both a great responsibility and a great honour that your team members may entrust to you. The leader must have a clear vision of the best way to lead the team.

One of the greatest challenges for a manager is how to become an efficient team leader. It is extremely important for all the team members to be able to turn their leader's vision into a feasible mission. Creating team spirit and team unity leads to improving work productivity, and ultimately achieving better results. And that is what all the people in companies, or teams strive for.

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STATISTICAL INDICATORS OF BUYING HABITS OF A CONSUMER AFTER OPENING OF THE HYPERMARKET

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Summary: *In this paper, were included 300 subjects from the territory of the municipality of Krusevac, in order to assess the impact on small hypermarket stores. Since the opening of the hypermarket published as new workers are hired, why are not asked what the status of the owners and employees of small shops, if they dismiss, or whether the small shops closed. The study found that more than 50% of consumers have changed purchasing habits. It was researched which are, for consumers, most important choice criteria (price, quality, proximity of residence,..). In this paper is also included an interview, of 20 owners of small shops, from their point of view and come to conclusions about the purchasing habits of consumers before and after opening a hypermarket.*

***Keywords**:* hypermarket, small shops, consumers, purchasing habits.

1. INTRODUCTION

The basic division of sales by type of retail facilities is to: traditional, traditional shops with direct sales and sales facilities self serving type.
Traditional shops with traditional sales - the term "traditional" in the trade are used to two concepts: the sales method and the space, thinking of the traditional, classic shops and trading company, in connection with the way its legal and organizational structure. So, we talk about the traditional method of selling, when using the direct method of selling through the retailer, as opposed to self-serving, when the product is placed on access to the client, and there is no direct contact with salesman. When we speak about traditional shop usually think of the store with a small retail space and a small number of employees and with the traditional regime sales, or as the most mixed. After a period of significant crisis of this type of sales as a response to the appearance of the supermarket today, the situation is much better. Classical store sales are 47% space in Europe. [20]
Supermarkets are retail space with retail and high system of self-serving turn supplies. Size supermarkets ranged from 400 to 2500 m2 offer in the supermarkets is based on the assortment of goods and food goods for domestic needs in the extent and nature, provided for a zone. Danas consumption on the market, there are supermarkets second generation, which contain different sales areas with expanded supply of drinks, prepared food, some durable consumer products etc. Also in this generation are maxi market (have a very wide range of goods such as textiles, durable consumer goods) and a mini hypermarket (very similar characteristics as the hypermarket but with a lower surface and narrowed range of goods offered). Supermarkets, in general, based on the sale of its sale of goods with moderate prices and sales policy account team that placed in close proximity to customers.
Hypermarket - sales area is self-types and offers a wide range of food goods and goods for other home necessities. Surface moves about 2500 m2 sales space. Hypermarket offer additional services such as parking, handling, and space for the holidays and the like. Organization of sales is so that goods taken in any part of the sales object, you only pay once, on the output cache registers. It is important to emphasize that hypermarket price policy based on reduced earnings, the average offering quality goods for mass sales, and demand.

2. PREVIEW OF SIMILAR RESEARCHES

Agency for market research "Puls" doo Zagreb, Croatia, for the research in the area of the whole of Croatia purchasing habits and the criteria that determine the purchase in 2003 year and in 2005 year [18]. Results of their research are: 54% of the daily purchases in small stores, while in this study came to the data that 64% of the daily purchases in small stores. The main criteria for choosing to buy in small shops are: the proximity of stores, prices of products and product quality. Less important criteria for choosing the pleasant environment and good organization of space, is close relationships with staff and various possibilities of payment. In comparison to 2003 year, these criteria are not changed. Great purchase is carried out in the hypermarket / supermarkets (64%), according to our survey 68% of respondents also done more to buy in the supermarkets / hypermarket. In comparison to 2003 year decrease in the purchase of specialized shops such as bakeries, markets, etc.. And customers buy in the shops where all the bulk, i.e. all in one place. Criteria of choice when large purchases are quality products (61%), affordable prices of products (59%). Less important criteria are the sweepstakes that are organized in the hypermarket, additional services (children restaurants, etc..). Large purchases are usually performed once a month (37%), 2-3 times a month (17%) rarely or never (15%) and once a week (9%). In our study, these results are different and larger purchase is usually performed 1 week (44%) and 1 month (28%).
Exploring what are the habits of customers in Serbia, Goran Tintor, director of market research agency GFK Belgrade, said that the Serbian customers enjoy shopping and constantly tend to increase consumption, and these indexes are in the top place in Europe.
So of the total traffic, about 40 percent of shopping done in small facilities, in which regardless of the higher cost usually buy citizens with low financial situation. However, these actions are not spending much money. Thus 39.8% of citizens in the small stores consumes between 150 to 300 dinars, while one fifth of customers consuming below 150 dinars a day.
In the period from January to June 2007 the most money was spent for coffee, then milk, fruit juices, chocolate laundry detergent, shampoo and deodorant. At least money is spent for deodorant and shampoo, which we are at the bottom of the European ladder - explains Tintor.
We often go to the so-called major purchases, when the average spending is about 3,400 dinars, or about 42 euros which is 30% more in relation to the period of two years ago. Approximately one fifth of people on this purchase consumes about 1,500 dinars, while there are also those whose accounts is about 6,000 dinars - Tintor states.

3. METHODOLOGY

In Figure 1 is shown the process of market research, which is segmented into five phases:

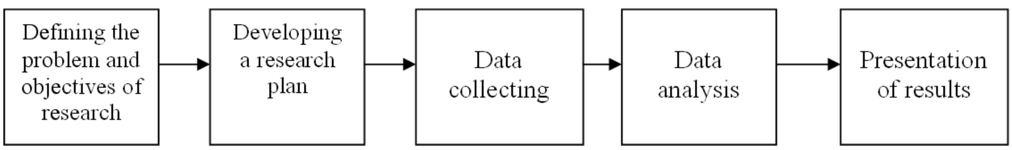

Figure 1: Process of market research

Part a response to the above problems can be found in the clearly defined aim of the research - identifying what the study wants to achieve. The aim of this research is the possible reduced to a few below the main objectives of which will be then aggregated sub causes of research:
- An analysis of retail market in the municipality of Krusevac, from the aspect of consumer and retail aspects of the owner of objects
- Define the habits of consumers

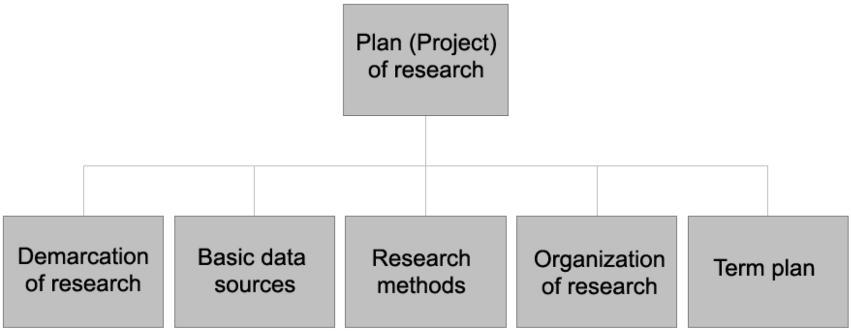

Figure 2.: The process of research plan

Explanation of research:
- Territory: Municipality of Krusevac
- Research Time: February - May 2008 year
- Subject Research: retail trade activities in Krusevac

The main sources of data:
- Secondary external statistical publications, professional journals, electronic databases
- Primary data: methods of study (survey-depth questionnaire and interview)

The study would, therefore, use the following approaches:
A. Desk research
B. Field survey
C. Depth interview

A) DESK RESEARCH

This analysis would have the so-called secondary data, and all relevant data that already exist, as such, or which may be further process the collected data or suitable crossing the existing database.
In this way, would be collected and analyzed the following data:
- General development characteristics of Serbian economy with grade influence the gray market
- Analysis of internal trade in Serbia in the period from 2002 to 2006 year
- Profile of Krusevac

B) FIELD SURVEY

Research in the field would be carried out in order to collect primary information and the work would be planned in detail a sample of respondents. In order to evaluate the current state of the retail trade in Krusevac, it is necessary to examine the situation see the relevant participants in the market, which means that the objectives of this study were:
- A model of purchase
- Socio-economic and demographic data on respondents
- The buying habits
- Criteria of choice when purchasing

C) DEPTH INTERVIEW

Depth interviews would be used for testing the owner of retail trade activities, emphasis on the owners of small actions.
Data will be obtained by implementing the research are a ton of collected information that will be ineffective if the key is not analyzed and the results obtained if it is not interpreted in the light of problems that need to be resolved. Analysis of the collected data includes several steps.
First, the manner and procedure of data collection must be complete, consistent and are conducted by applying the established instructions. This process is called "editing. Then, the process of coding that includes the allocation of numbers any answers, so that they can be further processed computer. The last step is the tab suppress, or display data using a table or in another format add frequency response of respondents to each question. Also, the data is often crossed with other variables.

HYPOTHESIS

a) More than 50% of people in Kruševac changed purchasing habits
b) Consumers do more buying in the hypermarket
c) Consumer as a criterion for choosing the most important purchase price, quality and all in one place

4. RESEARCH RESULTS

Details of this research are collected survey questionnaire, in which consumers responded. The research was carried out in supermarkets in the municipality of Krusevac, in the period from 01.04. to 10.04.2008 for a period of 9 days. Respondents were interviewed in all parts of the city. Interviews, respondents lasted less than 15 minutes.
Research that will be shown below includes a sample of 300 subjects from the whole territory of the municipality of Krusevac. Considering that the opening of hypermarket impact on small shops and purchasing habits of consumers, the criteria in the selection of purchase, included in the sample age structure over 18 years.
In Table 1 are shown in the demographic data of respondents

Tabla 1.: View of customers, size of sample N=300

Profile of respondents	Results
1. Demographic variables	
1.1 Women (%)	56%
1.2 Average age	35.65
1.3 Education (modus group)	High school
1.4 Occupation (modusna grupa)	Employed in private company
1.5 Marital status of respondents (%)	Married 50.33%
1.6 Number of household residents (average)	3.85
1.7 Type of household (modusna grupa)	Couple with children
1.8 Score of financial situation (%)	Satisfactory 48.33%
2. Purchasing habits of respondents	
2.1 Place of everyday purchase (%)	Minimarket, market 64.33%
2.2 Change of buying habits	No 60%
2.3 Period of major shopping	Once a week 44.33%
2.4 Place of major shopping	Hypermarketi 42%
2.5 Buying on special sales	Sometimes 66%

In researched sample is greater participation of girls 57%, while the men 43%. Most respondents are of the age structure of 18 to 25 years (89 subjects), and the age structure of respondents from 30 to 40 (62 respondents), and the age of 40 to 50 years (50 respondents). Educational structure of respondents includes different groups of subjects, from patients with primary school and below (5% of respondents), over the most numerous group of respondents with secondary education (58% of respondents), college includes 15%, completed the Faculty 21%, while the subjects completed master and doctorate include 1% of respondents. The greatest number of respondents employed in private firms 70 respondents (22.76%), the following students 61 respondents (20.70%), and employed in the social firms 57 respondents (18.96%). Also, the proportion of pensioners is not negligible - from a total of 300 subjects each tenth is a pensioner. The following owners of companies are with the participation of 7.5%, then unemployed with the participation of 6.5%. Housewives, people of free professions, answered something else represented in approximately equal numbers. This study included the smallest number of farmers, one that is 0.33%. Of 300 subjects who were included in this study 49% of the married, then the following singles with the proportion of 42%, 6% of the participation of divorced, and 3% the proportion of widowed. The greatest number of respondents living in the marital community and has adult children (21%), then the following multi generation family with the participation of 20.66%, and then other subjects that are not in martial community and living with parents or single parents (20%). Couples with children to 17 years take part of the 15:33%, while 11.66% of respondents living in the community martial with spouses, and their descendants live separately. At least have the participation of couples without children 4.3%. The greatest number of respondents considered that the financial situation is satisfactory, even 47%, then the following subjects who believe that their financial situation a good 26%, one tenth of respondents did not want to

give the answer to this question, 8% of respondents believe that his financial situation is bad, 6% think that is very good, and only 3% of respondents believe that material situation is very bad.
On the question of where do everyday purchase the largest number of respondents replied in the market 36%, then mini market 28.33%, following the supermarkets with the participation of 17:33%, while the answers in the discount, and more balanced and 9% of respondents. Respondents did not change the purchasing habits when it comes to basic life supplies and everyday shopping. On the question of whether you change the purchasing habits of when the open hypermarket even 60% of respondents answered that it is not changed purchasing habits, mostly due to Describing the vicinity of the place of residence. The remaining 40% of respondents, who change purchasing habits, explain that because of lower prices, all in one place, parking space, and more. Do you have a higher purchase 69% of respondents answered sometimes, and 19% of respondents answered that exclusively, while 12% of respondents not buying more. On the question of when you have a higher purchase 133 respondents or 44.33% answered 1 week, followed by respondents who purchase higher performing 1 month 28%, other (do not do them at all, or none of our answer) 17.33%, 2 times per week 9.66%, a minimum of those respondents who have greater purchase 1 day 0.66%. Higher maximum purchase is carried out in the hypermarket 42%, the reasons for the lower prices, better supply and all in one place, parking space. Supermarkets are in second place by the participation or 26.66%. 10:33% of respondents gave the answer the rest, in the market to buy the higher 8.66% and 4.33% in the mini market examines the larger purchase.

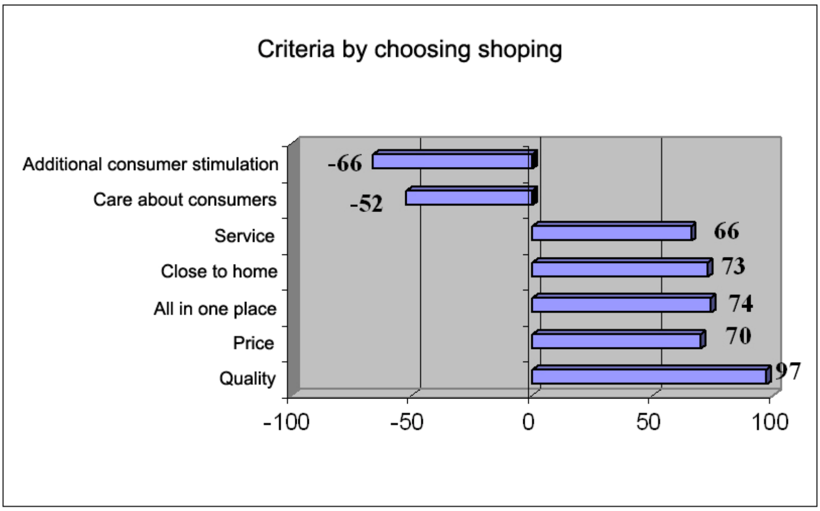

Table 2: Criteria for choosing the shopping

From the above chart it can be concluded that the criteria for choosing to buy on a scale from 1 - not important to 5 - very important, the most important criteria for choosing the purchase price and quality, all in one place, near housing and services, the care of consumers, and the least important criterion for choosing the purchase of additional consumer incentives such as sweepstakes and the like. 97% of respondents on the scale of the criteria selected is 4 or 5 as a very important criterion in the choice of purchase, 74% all in one place, 73% near housing, 70% price, 66% service. 66% of respondents chose 1 or 2 as irrelevant in the selection criteria for the purchase of additional incentives of consumers and 52% for care of customers.

HYPOTHESIS

H a) The initial hypothesis of this research is that more than 50% of the population changed purchasing habits when they open the hypermarket, we'll check with the 2.5% significance on the basis of questions from the questionnaire that they change the purchasing habits of where the 121 respondents answered positively and the remaining 179 respondents feel the same that they didn't changed purchasing habits.

Ho: P$\leq$ 0.5
H1: P>0.5

Number interested in the sample m = 121
Number of elements in the sample n = 300
Reliability coefficient of 2.5% in significance test on one border is 1.96.
Take the test on the upper limit

Po + zse(p)

The proportion of those interested in the sample:

$$p = \frac{m}{n} = \frac{121}{300} = 0.40$$

The proportion of those not interested in the sample:
Q = 1 – p = 1 – 0.40 = 0.60

Standard estimate error of proportions of the basic set:

$$Se(p) = \sqrt{\frac{pq}{n-1}} = \sqrt{\frac{0.40 \bullet 0.60}{300-1}} = \sqrt{\frac{0.24}{299}} = 0.028$$

$$Z = \frac{po - p}{se(p)} = \frac{0.40 - 0.50}{0.028} = -3.57$$

Reliability coefficient for the z 2.5% significance in the test on one border is 1.96.
Considering that the calculated coefficient of reliability of less than table reliability coefficient -3.57 <1.96 null hypothesis, we accept as true, that is to 2.5% significance can not say that more than 50% of the population changed purchasing habits.
Upper limit the acceptance of null hypothesis:

Po + zse(p)
0.50 + 1.96x0.028
0.5 + 0.055
0.555

Proportion, calculated in the sample, the less the upper limit of the acceptance of 0.4 <0555 null hypotheses and null hypothesis, we accept as true, and the alternative hypothesis is rejected as false. So, our assumption from the beginning of research is not true, i.e. less than 50% of the population changed purchasing habits, the level of 2.5% significance.
Upper limit the acceptance of null hypothesis
H b) Ho: Consumers perform more purchases in hypermarket:
H1: Consumers do not perform more purchases in hypermarket
67% of respondents answered that greater purchase in the hypermarket and supermarkets, so that this hypothesis, we accept as true.
H c) Ho: Consumers as a criterion for choosing are the most important purchase price, quality and all in one place.
H1: Consumers as a criterion for choosing arenot the most important purchase price, quality and all in one place
Given that 97% of respondents answered that they are a very important quality of products, as well as 74% or 70% that they are important and price all on one site, we can accept the null hypothesis as true and that the customers most important price, quality and on one place. Pored survey made the interview with the owners of small stores in order to assess the impact of the hypermarket sales, and change habits of customers, etc.
How to you determine the opening of hypermarket? Most respondents answered that the first hypermarket opening to traffic is drastically decreased, to some after a month back to normal, ie the previous state of affairs.
What has changed in the business when they open the hypermarket? Because of lower price items in the hypermarket, special sales decreased. As with the first question, subjects responded to yet returned to normal, because the consumers as the habits and near housing, and because when you buy in the hypermarket and buy products that are not planned, so that shopping in the hypermarket still turn out to be expensive. The small shops provide the same goods, as well as New, which appear on the market. Supermarket became more polite.
What is the composition of customers today, if you changed?
All subjects responded to the composition of customers is not significantly changed. Buy regular who usually live in close proximity.
What do you think why people buy you?

To this question respondents are the most thought what answer to give, obviously is to have never asked. However, all respondents answered that the reason to buy in their shops near housing, kindness and small services that make people.
On which way are you able to improve business?
None of the respondents was not optimistic at this issue, in the sense that anything can be improved with respect to the circumstances. But all would like to increase the range of goods, to have all in one place or that attracts customers, and the increase of the existing premises.
What is the range of goods changed by consumers buy?
All subjects responded to the range of goods is not changed.
You usually buy the goods?
Usually perform everyday purchases and basic life supplies: bread, milk, yogurt, cigarettes, coffee, and everything else depending on the price.
Methods of payment?
In small stores people buy for cash. Many small shops and do not have equipment for card customers because you do not want to pay. Owners of small shops to explain by the consumers of both the open hypermarket paid cards, bought and unnecessary things behaving is that the card was "borrowed" and thus spend more money than was needed and more than what they intended . After that, the back small stores and bought only what they need, paying cash, having an insight how much money is spent.
What do you think that you can survive a small shop since they opened hypermarket?
All respondents believe that their survival is endangered. Can survive the small shops that do not pay rental sites, and if you work in the shop owner and family members. Small shops are not able to compete with competition, hypermarket, because the hypermarket directly related to producers, so that they can give manufacturers rebate so that they and prices competitive.
Of which depends on your survival?
Respondents answered that their survival depends on the increased financial ability of citizens, and the equalization of conditions hypermarket business and small shops. The same treatment as well as state authorities who control the business, to Describing the fact that the hypermarket in better position.
All of the above can be concluded that the owners of small stores and the biggest problem of unfair competition and monopolies in Serbia.

5. CONCLUSION

In the field research is determined by sample size 300 respondents, over 18 years, where it came to the following conclusions:
- Daily purchase is carried out in the nearby shops.
- 60% of respondents did not change the purchasing habits of the open hypermarket, which confirm and owners of small actions, pointing out that the slightly changed the composition of customers, as well as everything else when it comes to business. The remaining 40% of respondents who have changed purchasing habits as a reason for citing lower prices, all in one place.
- 69% of respondents at the higher purchase, 19% only the higher purchase while the remaining 12% not greater purchase. Respondents, who have greater purchases, most commonly work once a week in the hypermarket.
- The most important criteria in the selection are the most important quality, and price, all on one site, near housing, services, and are at least important criteria of care for consumers and additional incentives such as sweepstakes and the like.
- For special sales regularly buys 10% of respondents, 24% do not buy the special sales, and 66% of respondents sometimes buy the special sales. Respondents are most special sales information through TV, through advertising leaflets.
- On the basis of deep interview was conducted in small shops came to the following conclusions:
- Population is the first month of opening a hypermarket in the same purchase, in order to later restore the nearby shops. The reason for this behavior is the proximity of residence, and when the amount of money. In small shops customers buy only what is necessary and the time for cash, no action sales so that you do not buy unnecessary things, and has the insight of the money spent.
- To improve the business owners to increase the range of goods, size of sales space because it would then have all in one place and that attract customers.
- The survival of small shops is called into question. General small shops that are owned by the local where the sales area, if you shop for the owner as well as members of households. The survival of small shops and that depends on what are the cost items. To attract customers this solution is in the procurement of goods directly from the manufacturer, and sales by discount prices, longer working hours, or small shop, or work after closing hypermarket.

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RESEARCH OF CONSUMER LOYALTY ON PURCHASE IN STORES ON EXAMPLE OF RASINA COUNTY

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Summary: *This paper examines the impact of satisfaction with the purchase and demographic impact on the loyalty of consumers shop. Data are gathered for analysis, obtained by interviewing the customers in hypermarket on the territory of the town of Krusevac. The test model was used descriptive statistics. Meaning of this research for retailers is that they can use information obtained to predict the factors that affect customer loyalty and create a retail strategy that will increase the satisfaction of purchases, consumer loyalty, which will be the outcome of increasing store traffic.*

Keywords: *satisfaction, customer loyalty, hypermarket*

1. INTORDUCTION

Consumer is a person who uses products and services to satisfy personal and family needs. Consumer has a desire for a certain product or service. The behavior involves the activities that people take when you choose, buy and use products and services to meet the needs and wishes. Such activities include mental and emotional processes in conjunction with physical actions [21]. By behavior definition, the research of consumer is how and why he buys and consumes [22].
The main objectives of behavior research of consumers are:
- To predict behavior on the basis of knowledge that is available, and
- To understand and explain that conduct in order to improve the theoretical knowledge in this field.

The purpose of the research of customer behavior is to reduce the risk of wrong verdicts business decisions and improve marketing strategies and actions enterprises.
Satisfaction (satisfaction) is an important feeling that happens in the phase of assessment after the purchase and consumption of products and services used. Customer satisfaction is the key to maintain existing and attract new customers [23]. The concept of consumer satisfaction is one of those who start at least the difference and conflict in the definition. Customer is satisfied when the "product or service meets or surpasses the expectations [24]. K. Hant gave perhaps gave the most complete definition by which satisfaction is a kind of experience breakthrough in order to exam the same. Someone may have a pleasant experience that can lead to dissatisfaction because, as though pleasant, is not well enough to be comfortable presume or expected. Therefore to satisfy dissatisfaction is not just emotional, to the assessment and emotions [25].
There is a significant correlation between the degree of satisfaction and loyalty of consumers. With increasing degree of satisfaction increases the degree of loyalty of consumers. It is however difficult to measure the connection between satisfaction and loyalty based on total consumer satisfaction.

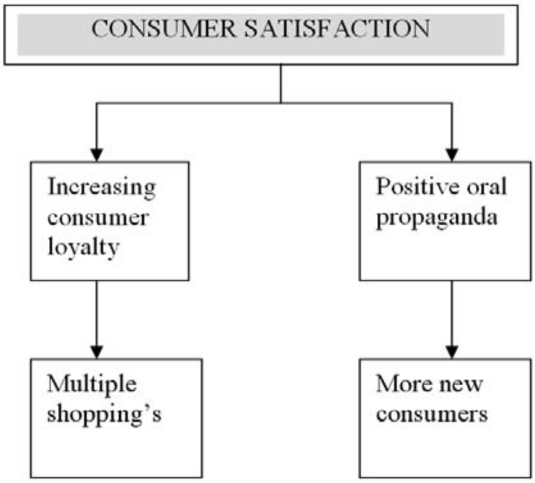

Figure 1. Uses from customer satisfaction [26]

Customer satisfaction by the purchased product or service for the company results in two primary uses:
- Increasing consumer loyalty and
- Positive oral propaganda of a product / service.

Increasing loyalty means a lot more of repeated purchases by existing customers. Positive oral propaganda as a very effective way of persuasion among relevant groups (family, friends, etc..). This leads to increasing a number in new customers. Namely, satisfied customers will "bring" more new customers, which will again, if they are satisfied with the result, bring new consumers.

2. OVERVIEW OF SIMILAR RESEARCHES

Although the concept of loyalty to the shop was an issue research in the previous period, and still is open to question the way in which consumers develop loyalty to a shop. Several factors influence the loyalty shop, including the appearance of shops (leHew, Burgess and Wesley, 2002; Sirohi, McLaughlin and Witting, 1998), satisfaction or pleasure (Stoel, Wickliffe and Lee, 2004; Sivadas and Baker - Previtt, 2000) and demographic characteristics. Explanations and conclusions about the loyalty store also have to include differences between countries and the evolution of retail in recent years. Considering that few know about the issues of loyalty shop in Serbia, much research is needed to assist managers to increase store loyalty.
Store loyalty can be defined in different ways. This includes consumer attitude, intention and behavior. Oliver's model of loyalty behavior is usually tested model in the literature. This model consists of four stages, including cognitive loyalty, affective loyalty, connotative loyalty and action loyalty (Sawmong and Omar, 2004; Sivadas and Baker-Previtt, 2000, Oliver, 1997.)
Affective loyalty (satisfaction) includes emotions of consumers, for example personal feelings of satisfaction or disappointment of purchase experience. Creates connections to individual product or store, the feeling that leads consumers to do shopping (cognitive loyalty). Connotative loyalty is consumer readiness to send a friend to a store, as well as the intention to re-buy in the same shop. Share loyalty is to express the frequency of going to the store, when the amount of money or percentage of consumers purchase made in this store compared to other shops.

3. METHODOLOGY

Process of market research, is segmented in five phases:
- Defining problems and goals of research
- Developing plan of research
- Data gathering
- Data analysis
- Results presentation

Part of a response to the above problems can be found in the clearly defined goal - identifying what the study achieved. The aims of this research are the possibility to reduce to a few below the main objectives of which will be then aggregate the sub aims of a research:

- Overview of retail market on the territory of Kruševac, from the aspect of a consumer
- Defining consumer habits
- Loyalty of a consumer to hypermarkets

Distinction of a research:

- Territory: City Kruševac
- Time of research: December 2008 year
- Subject of research: hypermarket in Kruševac

Basic sources of data:

- Secondary extern: statistical publications, professional journals, electronic databases
- Primary data: methods of study (survey questionnaire)

Data from this study were collected by survey questionnaire. The research was done in hypermarket in the town of Kruševac (DIS, Jukomerc, Maxi) in the period from 20 to 27 December 2008 year. Interviewers were examined on the door of the shop. Testing lasted less than 15 minutes after the subjects. Study covered a sample of 250 respondents. The following table presents the results of

Table 1. Short statistics of consumer sample, N=250

Consumer profile	Results
1. Demographic variables	
1.1 Gender	
1.1.1 Male	46.8%
1.1.2 Female	53.2%
1.2 Average age	38.7
1.3 Monthly budget modus group	35000-55000
1.4 Monthly costs in a hypermarket	5000-15000
1.5 Monthly costs in other shops	Do 5000
1.6 Size of a household (average)	3.5
2. Distance	
2.1 Consumers who live on the distance shorter then 15 min	47.6%
2.2 Consumers who live on the distance longer then 15 min	52.4%

Respondents were 46.8% male persons, while 53.2% girls. The average age of respondents was 38.7 years. The greatest number of respondents has a monthly budget of 35,000 to 55,000 dinars. U HIPERMARKETU a month on most of the respondents spend 5 to 15000th monthly costs are HIPERMARKETU to 5000 dinars. The average number of members in the household is 3.5. 47.6% of respondents living in the distance of less than 15 minutes, while 52.4% of respondents to the distance of more than 15 minutes from the shops.

From the above chart shown it can be concluded that most respondents are married with 58%, while 32% are single. Most respondents are with the secondary school 47%, while 23% completed Faculty, 20% completed high school, 6% from the master, Ph.D. and 4% of primary school and below. Most respondents were employed in private companies, the following employees in the social businesses.

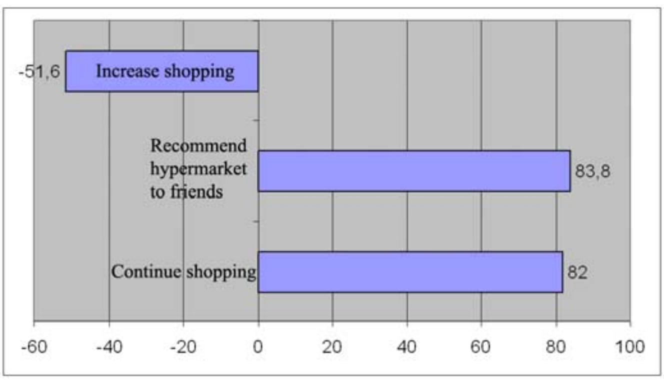

Figure 2. Preview of future consumer intentions

Subjects were on a scale from 1 (not) to 5 (certainly) responded to the questions that you still buy in this hypermarket where 82% of respondents answered with 4 and 5 the question of whether to recommend this hypermarket friends 83.8% of respondents answered with 4 and 5 whether to increase the purchase in the next 12 months, 51.6% responded with 1 and 2 explaining the current economic situation because they think that in the next year can only be worse, and with it to the possibility of increasing the purchase.

Figure 3. Preview of consumer satisfaction with hypermarkets

74.8% of respondents answered that it was satisfied with the purchase, 61.2% of respondents satisfied with speed of payment, 70.8% were satisfied with quality of time spent in hypermarket, 78.8% were satisfied with the efficiency of purchase.

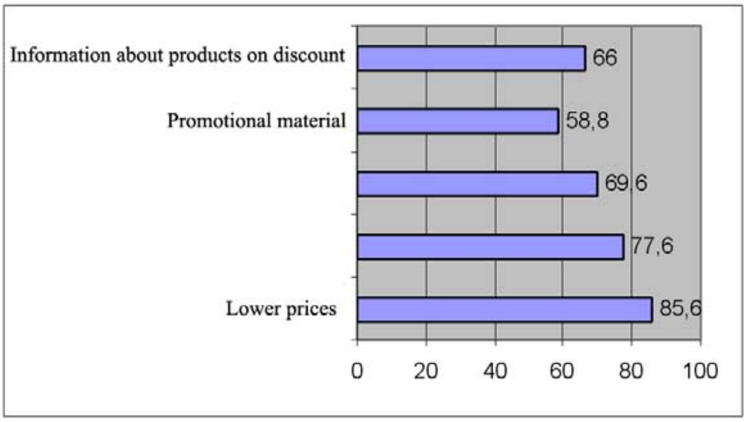

Figure 4. Preview of consumer rankings

Subjects were rank on a scale from 1 (little or not important) to 5 (extremely important) the importance of: 85.6% of respondents answered that they were very important and extremely low prices in hypermarket, 77.6% answered that they were very / extremely important to in hypermarket have constant promotional sales, 69.6% of respondents is very / extremely important promotional materials, 58.8% of respondents is very important to purchase products in the special sales, 66% of respondents is very / extremely important information about the products in the special sales.

4. CONCLUSION

The purpose of this research was a test of loyalty of consumer's hypermarket in town of Kruševac. The aim of management hypermarket the base of loyal customers who visit hypermarket constantly, and not so much interested to visit other competitive hypermarkets. Estimates are that the cost of attracting (gain new customers five times greater than the costs that the company has to retain existing customers. That is why the retention of existing customers than to attract new is more profitable. "Company "lost an average of 10% of consumers each year. The rate of profit is likely long-term growth if the company manages to retain existing customers. Customers loyalty, hypermarket will have if listened and meet the needs of consumers, because the best ads, ads satisfied customers. In our sample, even 83.8% of respondents answered that will surely recommend to friends this hypermarket, 82% respondents certainly continue to buy and still hypermarket. Our research came to the conclusion that they are extremely important in hypermarket low prices and promotional sales. Consumers we surveyed are satisfied with the purchase, time spent in hypermarket, speed of payment, and the efficiency of purchase.

CRM (Customer Relationship Marketing) is very useful because the focus is put on building and developing long-term relationships with customers. Retailers need to direct their efforts to build mutually beneficial long-term relationships with major existing customers. In order to implement CRM strategies must be continually improve the quality of products and services, in order to meet the higher level of customer satisfaction. Developing long-term relationships with customers in the company is able to know well the needs and desires of consumers, as well as their expectations regarding the quality of products and services, and to fully meet or even exceeding.

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ACCESSIBILITY – IMPORTANT DIMENSION OF MEDICAL SERVICE QUALITY

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Summarz: *This paper describes accessibility as an important dimension of medical service quality. Accessibility mark easy way to access to offer medical services. In this paper it is parted to elements, from which each contains certain number of quality indicators. Quantification of elements in the paper is presented taking into account three medical institutions, which has not started with implementation of quality standards, yet. Obtained results show that there is disproportion among the values of elements and by that dimension of accessibility of services to some desirable condition. In order to achieve it is necessary to realize at least activities, which are presented in this paper.*

Key words *: service assessiblity,health organization ISO,ISQua, quality*

1. INTRODUCTION

Medical service is defined as an activity within the process of health protection that can be performed independently or in the package with other services , once or several times within the health protection , but is always maintained in the same way and represents the unit for itself [2].
Special specific thing of health protection is inspection and testing of all elements that are used within realization of health service. Testing and inspection represent continual process [5].
Today, within health protection it is necessary to achieve rationality and efficiency in dyagnostics, therapy and rehabilitation. That can be realized through new qualitative organizational and technological processes. The standards and norms of health services determine who, how, where, when, with which material, by which aparatus and equipment certain meical procedure should be done. Their acceptance and implementation represent new organizational-technological process that in certian amount contributes effeciency and quality of health protection.

2. NECESSITY OF IMPLEMENTATION OF QUALITY STANDARD IN HEALTH CARE

The components of quality embrace high level of professionalism and knowledge in relation to available technologies, efficiency in resource use, and minimal risk for patients, satisfaction of patients and final result of health service.
The quality of health service understands equipped staff, standardization of services, prevention, reduction of risk in work, efficiency and effectiveness to make diagnosis and implementation of therapy procedures, wide culture and communication and satisfaction of patients – beneficiaries of services. In short, that is set of measures by which health problems of patients can be solved. The quality of service can be considered at the level of health institution (management) or at the level of the staff taking part in performance of services.
Figure 1 shows the model of health service process.
Key point is that the quality is complex and multi dimensional and that it is not easy to quantify it or summarize in a simple way due to which there is an expression "*the quality is hard to define, impossible to measure and easy to recognize*".

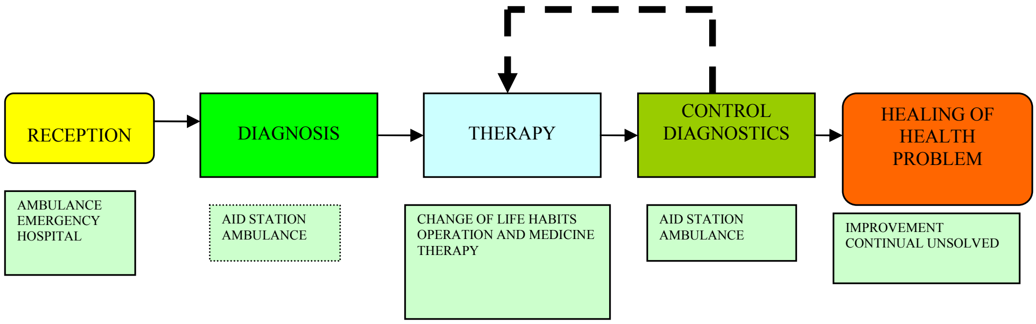

Fig. 1 Flow of activities within the process of health services

Speaking about the standards in health protection the following reconsideration is imposed: whether they regulate square meter of space, number of doctors and nurses, number of teams etc. which means the necessary structure for functioning of health system as presumption for processes and results of health protection. Until recently, very few have been thinking about the standards dealing with processes and results of health protection and about the way for measuring of work quality.
There are minimal standards that represents what should be satisfied and without which health protection is not acceptable. Optimal standards represent the degree of excellence that can be achieved only by those who are committed, but optimal standards after certain period of time can become minimal as the requests keep changing and improving.
The standards give recommendations what should be done and they do not regulate ways and norms how to achieve that. Everyone has the right to reach qualitative service in his own way, as he considers the most suitable for certain conditions, available for the staff and money.
The standards of medical practice request consensus in order to be realized and adequately understood. They should be compatible and complementary. [6]
The recommendation that should be set during definition of standards is to do carefully and in teams, so that the standards are the result of corresponding collective opinion about accepted or desirable level of work (quality)
It has already been said that they are dynamic and that their reviewing is permanently done with possibility of improvement.
By the regulations of each state , in a certain way , the conditions for health service , contents and range of it was well as way to achieve health insurance are defined. Mentioned documents have general character. In a certain way they can be considered as standards, as they regulate the relations and the ay of use of health protection.
On the basis of these documents, the standards of professional practice are defined, which closely determine organization and way to give services for illnesses i.e. categories of patients. In that sense it is necessary for standards to connect structure (rights of insured, conditions and way of use of the service), process (contents, range and way of service giving) as well as the outcome of health protection. All that is in a function of actual health needs, i.e. health problems and it reduces possibility to give inadequate health protection and problems in practice. It is also necessary for standards to stimulate behavior of persons that give health protection services through education and training [2].

3. STANDARDS THAT ARE NOT USED IN HEALTH CARE

3.1 Application of ISO standards

The requests of ISO standards are very important for production and service organization, but at first glance they do not refer to the activities in health care. Especially earlier editions of series ISO. The terminology that was used in standards could be hardly connected with health protection and different national associations would differently explain that. That is the reason why there are fewer certificates in this field than in others.
ISO standards 9000 (version 2000) are adapted so that it is easier to apply them to health care and include them in the evaluation of outcome and satisfaction of patients. Maintained system according to ISO 9001:2000 is enclosed by directives from ISO **9004:2000 , IWA 1:2005** and guides for good medical practice suitable for accreditation of certain services that certain health organization offers.

3.2. ISQua – International standards for accreditation of bodies for external evaluation in health care

International Society for Quality in Health Care – ISQua started with the Program of International Accreditation **(IAP**) under Acronym **ALPHA** in 1999. This program gave recommendations for evaluation of existing situation to the national bodies for accreditation and later on extended its program of accreditation to other bodies for external evaluation and maintenance of standards in the field of health care.
Now, their activities are:

- accreditation of teams (institutions) for external evaluation
- accreditation of standards in health care which are in accordance with ISQua in International Principles for Standards
- accreditation of training programs, including training programs for auditors inspector/revisers
- education , training and support in preparation for accreditation

ISQua is non profit, independent organization which embraces above 70 countries members. ISQua gives recommendations to health professionals, service givers, researchers, agencies and beneficiaries in order to achieve excellence in health care and in order to improve quality and safety of services.
ISQua International standards for accreditation of excellence of health institutions embrace requests of **International Organization for Standards (ISO)** for bodies for certification, baldrige criteria of excellence and model of excellence of European Foundation of Quality Management **(EFQM**) **[7]**
ISQua Standards give recommendations that are necessary to achieve in order to give qualitative evaluation of services. They are based on criteria that are measurable components of standards. The criteria show key structures, processes and results necessary for efficient application of standards.
Main directions of ISQua are **[10]**

- security of patients and health protection
- risk management
- motivation of health staff in providing of qualitative care
- satisfaction of patients as evaluation tool in evaluation of accreditation satisfaction
- development and improvement of indicators in all fields and
- accreditation of health institutions

There are eight ISQua standards:
Standard 1: Management and strategic directives
Standard 2: Organization and management
Standard 3: Human resources management
Standard 4: Choice, development and distribution of auditors
Standard 5: Financial resource management
Standard 6: Information management
Standard 7: Management by auditing/evaluation
Standard 8: Process of accreditation/certification
which are

- clear, based on logical foundations
- measurable
- based on contemporary researches of quality
- embrace requests for development of standards given in mentioned eight separate ISQua international standards.

4. ACCESSIBILITY OF SERVICES

Accessibility understands that each part of health system should provide correct accessibility to health care only on the basis of patients needs regardless their resident places, social-economical situation and ethnical belonging, age or sex.
Simply, by the analysis of standards requests and principles of accessibility the service can be parted to the following elements [10]:

- physical access
- range of services towards needs
- waiting for service
- adaptation to cultural and spiritual needs
- Mission/goal of health organization.

Each of these elements consists of certain number of indicators which are in comparison to accessibility about 90 (for teams of family medicine, hospitals and health centres). Parting of elements is shown in Figure 2.

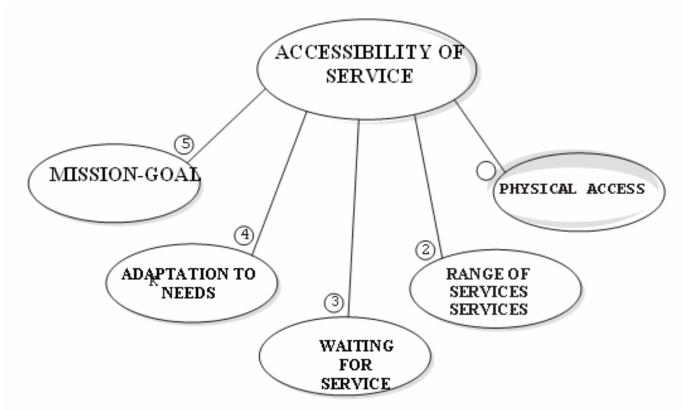

Figure 2:

Accessibility can be presented by the following equation:

$$\mathbf{P = p_1 \cdot Pe_1 + p_2 \cdot Pe_2 + p_3 \cdot Pe_3 + p_4 \cdot Pe_4 + p_5 \cdot Pe_5 .... \quad (1)}$$

where:

p_1, p_2, p_3, p_4, p_5 – are ponders of importance
Pe_1, Pe_2, Pe_3, Pe_4, Pe_5 – elements of accessibility (properties of quality)

Let us assume that maintained analysis of condition in three medical institutions, in order to determine approximately the accessibility of service and identify disproportion between the existing and some desirable situation that would improve the quality of health service through the dimensions of accessibility. It is important to stress that tested health organizations have not started with implementation of quality standards.
On the basis of experience in up to date work the value of ponder is determined, while on the basis of assumed analysis of existing situation of accessibility of services the properties of elements are evaluated in the range 1-10. Putting these values in equation (1) the value in numbers for accessibility of health care is obtained.

Table 1: Value of elements of Accessibility for analyzed health organizations

ACCESIBILITY TO SERVICES	Ponder	Health organization A	Value t	Healorg.	Value	Healorg. C	value
Physial access	0.3	5	1.5	6	1.8	6	1.8
Range of services towards needs	0.2	4	0.8	4	0.8	5	1.0
Waiting for service	0.3	6	1,8	7	2,1	7	2.1
Adaptation to cultural and spiritual needs	0.1	8	0.8	7	0.7	6	0.6
Mission / goal of health organization	0.1	6	0.6	6	0.6	6	0.6
TOTAL	**1,0**		**5.5**		**6.0**		**6.1**

From **Table 1** it is evident that obtained values are not at satisfaction level. In order to increase the values of elements, separately and collectively it is necessary to maintain the following activities of service accessibility:
Through physical access it is necessary to provide:

- easy access
- access to invalids

- the right to access
- existing of toilets , elevators, fire doors , telephone
- marks of emergency access
- visits and etc.

Range of services towards the needs must:
- define services according to categories
- give information about services
- prepare guide for patients
- prepare list of organization units
- provide information on reception desk and etc.

Waiting for service requests:
- definition of time for waiting
- determination of working hours of service
- procedure for contact with staff after working hours
- definition of time for waiting on scheduled check-ups
- check-up in determined time
- determined time for laboratory results
- determined time for radiological x-rays
- determined time for waiting for scheduled check-ups and etc

Adaptation to cultural and spiritual needs embraces:
- services without discrimination
- respect of cultural and religious tradition
- definition of procedure after the death of patient and etc

Mission/goal of existing health organization gives basis for all aspects of planning and for vision which defines directives of development. The mission must:
- be clearly defined
- contribute to definition of goals
- define priorities
- express commitment for quality and etc

5. CONCLUSION

It is not just the quality of each doctor work that influence on the quality of health care of the organization , but the quality of organization of health system , as well. The determined elements, dimensions of services which should be the subject of attention can serve to management in bringing of decisions whose aim is to improve quality.
In this paper the dimensions of service are shown to be measurable by using corresponding indicators. Each dimension of the services is parted to elements for which the ponders of importance are determined by evaluation in three health organizations and values of indicators determined.
As the quality of service has never been that good that it could not be better, the results obtained by calculation of elements show that it is necessary to maintain several activities that are presented in this paper. The main thing is to implement standards of quality. In that way by satisfaction of these requests the quality will be improved till the level that will provide qualitative service.

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DEVELOPMENT AND APPLICATION OF THE DOMESTIC DESIGN – THE IMPERATIVE OF THE FUTURE DEVELOPMENT OF THE TEXTILE AND CLOTHING INDUSTRY

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Summary: *Enhancement of the design level becomes an imperative of the future development both textile and clothing industry in our country, which desires an equal position on the international market as the foreign producers of the same or similar product have. Design function in garment is joining and responding to all demands of a modern man concerning function, commodity, aesthetics, social and economic factor which are particularly important in mass industry. Nowadays, when almost every product please their basic purpose, design has a vital function in consumer's destining for a product among many other product available on the market. Besides, design combined with technology creates both better performances and new textile material qualities, expanding their appliance on spheres in which textile is not so widespread.*

Keywords: *design, tekstile and clothing industry, marketing, fashion*

1. INTRODUCTION

Certainly the main strategic aim of the development of the textile and clothing industry is meeting the consumers' wishes and demands on domestic and international markets, and accomplishing optimal financial results. It is not possible to accomplish the main aim without defining and fulfilling series of aims on the marketing concept.

Fashion companies depend upon consumers who continuously buy their wardrobe, and the key of this loyalty is satisfying the consumers' demands with the products that have style, permanence, which are easy to maintain, which are comfortable, offer quality in exchange to money and fulfil all other criteria that a consumer regards as relevant, ([1] p.7).

Fashion designers should respect the need to understand the consumers. The designers are trained to deal with problems as if the limits in time and money do not exist, in order to show their creativity. However, good designers should have knowledge about business or marketing and to apply this knowledge, and not allowing this knowledge to limit their freedom, creativity and imagination. Designers' creative freedom has more limitation than the freedom of painters and applied artists, because they design useful objects strictly according to the demands, needs and wishes of the consumers. The art satisfies human spiritual spheres, the design must satisfy company's interests in profit, as well as the consumers' interest that use the products.

The consumers are the starting point and the final goal of the marketing research and product design. All business dealings as well as the future of the product it self depend upon consumers behaviour and attitude to the new product. That is why the design and marketing importance is high for modern textile industry.

Many organisations have accepted the modern marketing concept and in that way succeeded not only in designing but in selling and acquiring profit. The key for successful business and development is long term satisfaction of the consumers, and this is in accordance with the modern marketing concept. Satisfying the consumers demands, needs and wishes are the nucleus of the marketing concept.

To that effect, the modern industry company must have the products that are designed and made on the marketing information system basis. Information gained from the marketing research are dictating factor of the complete business process and production. On the basis of this information the process of designing is dictating as well as the researches, development and product producing, because they point the needs, possibilities, demands and desires of the consumers. Every new product must go through the design process.

2. THE PROCESS OF THE PRODUCT DESIGNING

It is necessary for the company to pay an attention to the research and development function in order to make the company develops and grows. The company must constantly keep pace with technological achievements as well as the science development but also the consumers' desires. In order to keep pace with the competition, the company must constantly to introduce some new and high-quality products in its production program. Starting point for the new product program are the consumers' needs.

Designing implies wide range of related activities that regard to rationalising and defining the phases in the production process of the future product. Designing represents a group of a designer's activities and members of an expert team in order to make or research and development of the existing product. Design's aim, as well as of the whole company, is to create a new product that is based on the consumers' needs, demands and desires. In the process of making the product, designers put in a lot of effort and activity in order to make their product of a higher quality than the competition's one. In this respect, all phases and activities of the designing process in which a new product is made, have many distinctions which make it a special creative work. One of the design distinctions, that is the designing process are the components which encompass the process. The components are the essentials parts of the design and they represent its inclusion in the product designing process. In practical sense, the components represent the activities phases of the designing process in which new products are made. These are usually material products, which are useful to the industry, consumers and society. These benefits are multiplex, and they have economical, technic-technological-industrial-delvelopmental, sociological and psychological feature.

To contribute to the successful marketing, the product design must simultaneously and accordantly solve five vital functions:

1. design in terms of distinction or competition differentiation, which assum innovation and creativity in designing;
2. design in terms of production–the designing should make easier the production, provide the thriftiness of the production, respect the availability of the fittings and components, availability of the technology, alternative methods of the production process and their costs;
3. design in terms of the consumers needs–the accent is on the primary function or utility value of the product which must emphasise the functionality, quality and usability of the product;
4. design in terms of aesthetics–which increases visual identification and attractiveness of the product;
5. design in terms of distribution – its aim is to provide simpler and more acceptable costing of packaging, handling, transport and storing of the product. ([3] p.252).

The product as the result of the designing which is the process demand of the producer, should have following four components, ([7] p.84):

1. technically dynamic,
2. aesthetic,
3. economy and
4. ergonomically.

These four separate qualities make total quality of the product, which is the basis of its utility and economy value. To understand the gist of the design components which make it the symbol of the product quality and creative discipline, it is necessary to observe the relation: ideas – finished product. Designers, thanks to their talent, imagination, fantasy, expertise and experience create the ideas in their mind. In creating the idea the important part have the conditions in which the designers work, and which should be provided to them by the managers who must keep in mind the influence of the design on the business. The idea is a precious creation and it has great value for the company and the consumers. It will become a product, which is the point of the production, it influences on gaining the profit and it satisfies the needs, demands and wishes of the consumers.

Design, as the creative activity, has its practical sense when is formed in the company as a separate organisational whole, as a sector which has its own workspace, necessary instruments and what is the most important – expert team of the designers and accomplices. Designing process is happening in the design sector, that is its phases through a new product, which consumers demand on the market, is created. The organisation structure of the company in which the design is an integral part, directed by the marketing, must always be in accordance with the production aims. Well handled design and marketing organisation presents an important prerequisite for the market orientation of the company and successful product designing.

Well handled design organisation in the company makes possible:

- Continuously and swimmingly designing of the new products and redesigning of the existing one;
- Designing of the product which would be more efficient and more competitive on the market;
- Constant development of the product;
- Organised and constant corporation, that is information exchange and activity in other sectors, especially with the marketing sector.

3. AN IMPACT THAT DESIGN HAS ON THE COMPANY BUSINESS

The impact that design has on every company is seen through the continuous creation and development of the company, that will be superior on the market regarding product quality in comparison to other competitive products. The quality of the product created in the design process, secures a stable market position to the product, as well as to the company. If that position is stable for a long time, than the company will have high reputation both in industry and on market, it will attract consumers, it will increase the sale in a period of time, and it will increase the production. Planned profit is a result of this.

The product design which is continuously created, has an impact on the company's economy as an economy subject. Therein, the design impact is very important on the profit growth and capital accumulation. However, there will be no profit if the consumers on the market do not accept and buy new products in the size which is profitable for the company. This is the main point of the design in the production and in business, that is, the company's economy. Because of that, the position on the market depends on how designers create new products regarding quality and competition**.** ([7] p.66).

Considering the higher supply than demand on almost every market in the world, it is obvious that the company can increase its own sale only if it represses the competitive sale, and this is achieved by having quality, competitive and efficient products. Products like this can be made only by the design, in corporation with other functions in the company. The design must be integrated with the marketing and than with other sectors (production, research and development), and the management has to be applied both in the company and in design sector. The corporation between design and marketing will provide the product designing and forming of the product range strictly according to the market institutions, and above all in accordance with the needs, demands, wishes and purchasing power of the consumer. On the other hand, management in the design sector will provide planning, organising, managing and controlling the creation of the new product – in accordance with the company's business goals.

4. THE IMPORTANCE OF THE DESIGN ON DOMESTIC FASHION INDUSTRY

The aim of the design in textile and clothing industry is composed of joining and responding on all demands of a modern man regarding function and commodity, aesthetics, social and economy factor which are particularly important in mass number production. One of the main factors for the garment sale is aesthetics. On the products of the clothing industry the first thing that is noticed is appearances and details, and only than the elements such as price, quality, texture. Therefore the need to create and develop the design in order to increase the aesthetics of the textile products for the wide range of the consumers is intruding. For modern industry, the design is of a great importance. Today, when almost every product satisfies its own basic function, design has an important role in consumers' deciding for a product out of a wide range of products on the market. Today, the clothing industry has an important place in overall industrial complex of the Republic of Serbia regarding employees, import and role in the gross domestic product. Thereby, this industry has never enjoyed any kind of important support or a help of a foreign country.

Taking into account the market conditions and internal factors, the clothes producers determine the goals of their own business. The main strategic developmental goal of the clothing industry is meeting the needs and demands of the consumers on domestic and international market, by accomplishing the optimal financial results. It is not possible to accomplish the main goal without defining and realising series of goals on marketing concept. Some of the most important goals of domestic clothing producers are:

- Adjusting the methods and organisation to the marketing concept,
- Observing the technologic equipment and necessary investment in the equipment,
- Providing the deficiently cadre, especially of the technological and marketing profile,
- Applying the world's standards in the production ISO 9000 and ISO 14000,
- Improving the quality and design of the garments,
- Continuous monitoring of the fashion trends and swift reaction on the changes in needs and demands of the consumer,
- Accomplishing the competitiveness in price by increasing the productivity, ([1] p. 230).

Only new product introduces new fashion and the core of the design process is to create new fashion. The producers who do not create new fashion, but only imitate it, are always in subordinate position. They are always behind new fashion regarding time, so they appear in the market when the producer of the new fashion has already sold a significant amount of products. Bringing the design to a higher level becomes an imperative of the future domestic textile and clothing development, which wishes to have an equal position on the international market along with the foreign producers or similar products.

One of the most important goals of the design is to create as competitive and efficient products as to prevail over other producers' products, and to be sold in optimal range and to contribute to the planned profit. Designing can

be observed in a company in the creating new and improvement of the existing products. The main part of the design in the production and business is constant designing of the product that will make work easier for the people, bring standard to a higher level, make life more beautiful and create satisfaction while using the product. As a creative discipline, design has an important part in production and business as well as in satisfying the consumers.
The process of creating a new product lasted shorter before the marketing concept appeared, it as simpler and the main goal was to form technologically efficient quality. The less attention was paid to other qualities of the product. This was because the demand was higher than supply. Today, when the mass number production create higher supply than demand, the producers are faced with the problem how to sell a product on the market. There is a fierce battle of the competitors in the market in which only the producers who offer a product that has high-quality, that is efficient and generally used product will succeed.
The experience study shows that the development and improvement of the existing products is always bound with smaller or greater risk. This statement is based on the following facts:

- The great number of ideas is never put in reality;
- Many products exposed on a fair which are rewarded with prestigious rewards were never put in production because they were unprofitable.

The clothing industry as an industrial production is relatively small economy branch (exists since 1960's in our country) so the most companies has good technology for a high-quality production, but observing the textile industry as a whole, we can conclude that it is very old technologically. To develop this sector efficiently (the gross domestic product growth, higher competitiveness, taking better strategic positions, technological, business and other modernisation) the cadres with modern abilities are missing at the moment. Despite all existing problems, the textile industry has a great impact on the Serbian industry, and a perspective to, if all advantages are used and big problems are successfully left behind, to stay one of the most important industry branches. With regard to the effects that a textile industry has on overall industry activity, it could be said that the textile industry in Serbia is one of the strategic industry branches. The perspectives of the future textile industry development in Serbia is above all the need for changes in production, which is conditioned by the need to advance the production program. The changes should take part in the product production direction with higher additional value. These products are those whose price is not of a great importance to the consumers, but some other distinctive product characteristics matter to them. Distinctiveness could be achieved on various ways: promotion activities which will create a certain brand, orientation on satisfying the specific needs of a certain parts of the market, excellent product quality, design, and use of new technological achievements, reliability and swiftness in delivering, afford services after buying the product ([2] p.81).
Serbia has to be competitive on the international market with finished garments, good fashion and brands. Development of its own fashion brand are potential that could be created in 5-15 years ([5] p.61), because Serbian industry is short of its own products that could be offered on the European market, and the greatest export part so far was finishing work. One of the long-term domestic textile and clothing industry development measures is creating a domestic product brand intended for higher or medium caste first off from the EU countries, as well as some rich purchasers from the near East interested in the European styles and fashion trends.

5. OPINION POLL

In the past several years of harsh crisis, our industry, especially textile and clothing one, is characterised by: small range of production, frequent stoppage of work, deficiency of skilled and managing cadre in the industry, expensive raw materials; because of this a study was conducted on the Serbian territory and the purpose of it was to get the opinions from various experts different vocations and functions in textile and clothing industry, economy, education, scientific-research work, and all have the aim to develop and textile and clothing industry and its importance for the development of the national economy. An interview is direct and structured and its role is to provide relevant opinions of the experts in textile and clothing industry. A questionnaire is projected to encompass the advancing of the business, issues as well as education in the company, recommendations and suggestions for advancing.
Professors of technological and technical collages of the textile speciality and high speciality textile schools, researchers in scientific-research institutes, leading engineers and managers in big industry systems in Serbia, industrials and managers in small and middle size companies in the textile industry in Serbia (Belgrade, Novi Sad, Zrenjanin, Stara Pazova, Novi Pazar) are in the expert group. The large number of expert examinees are women (70%), while men are represented with 30 %. Regarding to other demographic index, age structure, the greatest number of the examinees are 30-39 years old (34%), than those who are 40-49 years old (26%), and those who are 50-59 years old (22%), than those who are 20-29 years old (14%), and over 60 years old (4%).

Regarding the examinees education profile the greatest number are engineers (54%), designers (24%), economists (16%), and other profiles (6%).
In relation to expressed attitudes regarding the need to compare domestic business organisations with market leaders, the need was imposed to determine the cost of the technological level of the domestic business organisations. The greatest number of the examinees from the expert group thinks that the technological level of the domestic organisations are at the average level, as well as the competitive ability of the domestic textile industry organisations in comparison to developed countries.
The greatest number of the examinees from the expert group (50 %) thinks that the technologic level of the domestic organisations is average, than low (26%), satisfactory (16%), unsatisfactory (6%) while only 2% thinks that the technological level is high. When evaluating the competitive ability of the domestic textile industry organisations the greatest number of the experts (58%) think it is average, satisfactory (22%), smaller part of the experts thinks that the level of the competitive ability is low 18%, while only 2% examinees think it is high.
The research referred on one part to the problems that domestic textile industry organisations are facing with. The experts think that the most important problems that the domestic textile industry organisations encounter with are old equipment (27,54%), financial capital deficiency (17,39%), deficiency of the skilled cadre education (16,67%), innovation deficiency (10,14%), and inadequate appliance of the information technologies (10,14%).
The greatest number of the analysed experts, 90% of them thinks that the textile industry companies have perspective, and the main reasons for that are:

- It has cheap and experienced labour (34,48%),
- It has experience in the "lohn" work with foreign partners (28,74%),
- It has reliable existing infrastructure (14,94%).

The main factors to gain competitive ability of the textile industry companies are advancing the knowledge of the employees (32,29%), by privatisation (18,75%), by applying the concept of quality management (16,67%), attract the foreign investments (12,50%). The greatest number of the questioned experts (62%) has a positive attitude about reorienting textile industry in the clothing industry and new garments designing direction. Also, the greatest number of the questioned experts (98%) thinks positively that we can achieve enviable results in the clothing industry.
The experts think that the flexibility of the domestic clothing companies (35%), the experience in the "lohn" work (33%) and cheap labour (28,33%) are the greatest reasons that will enable us to achieve enviable results in the clothing industry, while monitoring the fashion trends (1,67%) and innovation and creativity (1,67%) show in which direction should our clothing industry go, to become competitive, which is showed on the figure 1.

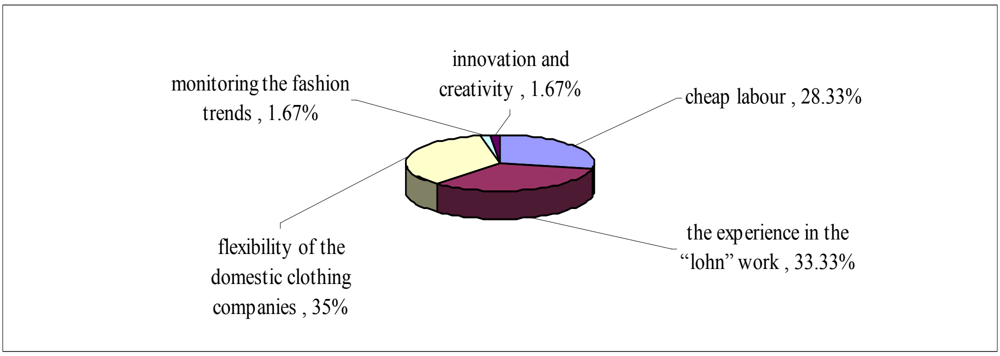

Figure 1: The reasons that will enable us to achieve enviable results in the clothing industry [6]

In connection to the research, there is an interesting information regarding the future of the textile engineer, that is seen by the domestic experts as a textile and clothes designer (32,26%), knowledge worker (30,65%), technological manager (27,42%) and only 9,68% see him as a development researcher (figure 2) which confirms the previous issue that the textile industry should reorient to the clothing and fashion industry and to the new garments design.

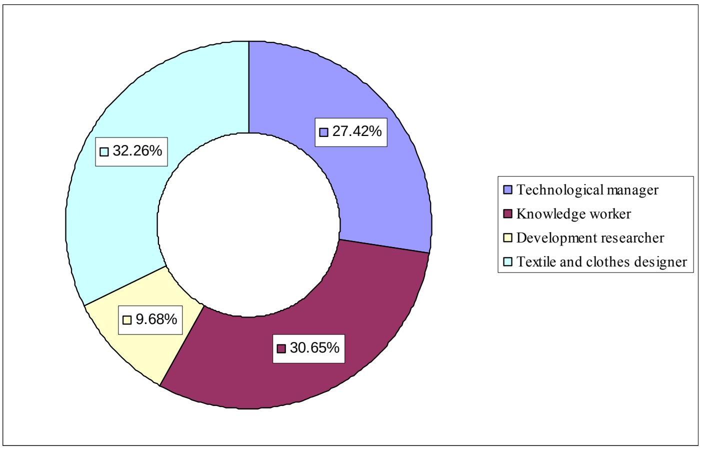

Figure 2. The future textile engineer [6]

The cadres with modern abilities are missing to efficiently accomplish development of the textile sector (gross domestic product growth, higher competitiveness, taking better strategic positions, technological, business and other modernisations) and therefore education and education of all employees is a precondition to achieve better business effects, first of all the business productivity improvement. Textile engineers education need analysis currently working in the textile industry companies show that they should be educated in the computer and information area (28,35%), foreign languages (16,54%), management (16,54%) and quality menagement (14,17%), design (11,02%), marketing (9,45%) and entrepreneurship (3,94%), all illustrated on figure 3.

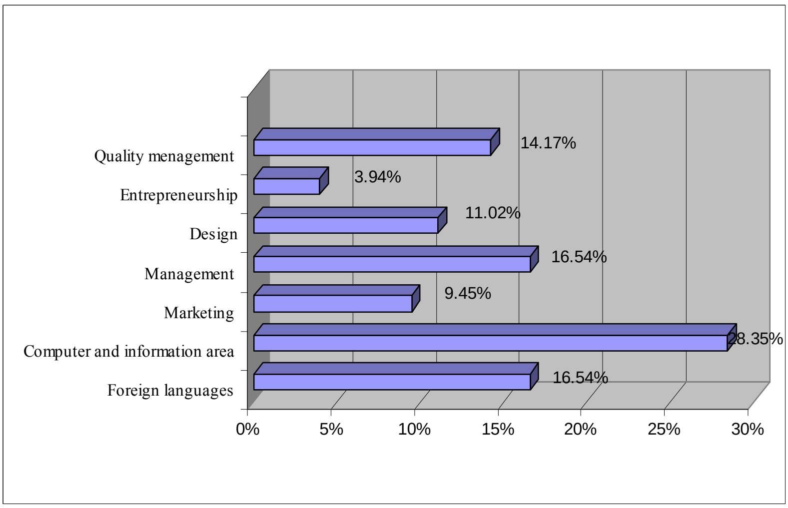

Figure 3. The need to educate textile engineers currently working in the companies [6]

From great number of mentioned reasons, the experts suggest to the high school institutions compulsory vocational practical work (26%), creating the chances to visit foreign country or to do practical work there (16%), introducing new branch subjects (15%), frequent cooperation with the organisations regarding an information exchange (12%), employing domestic and foreign experts to teach branch subjects (11%).
The new way of studying according the Bologna declaration, means well balanced combination of theory and practical work, and the experts think that the students should be directed in design direction during the practical work (39,68%), through knowing the software packages (31,75%) and in the productivity increase direction (28,57%), as showed on figure 4.

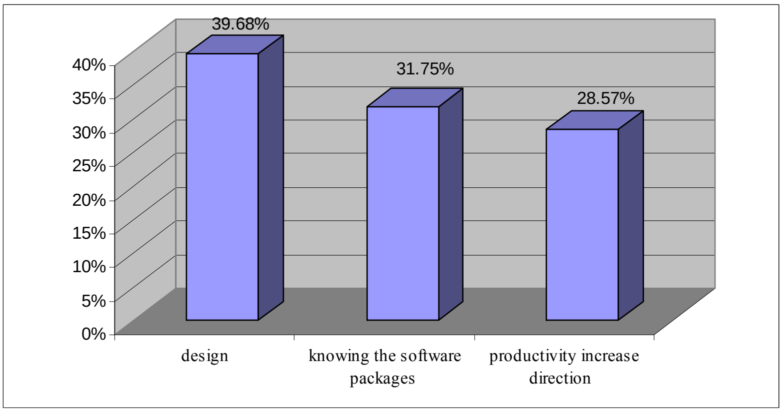

Figure 4. The direction in which the students should be directed during the practical work [6]

6. CONCLUSION

Thanking to the factors that are not connected to the prices many companies from developed countries are highly competitive (quality, design, wide range of products, top-level standardisation, delivery deadlines). Serbian textile and clothing industry is not competitive in this sector because of the fact that the high quality performances have become dominating factor of competition on the developed countries' market.

In future, textile and clothing industry will survive and successfully do business only if it changes the business policy, which must be more focused on the demand–to adjust to the eventual changes, to meet specific customers needs and to easily and quickly reorient from one type of production to another as well as to keep pace with new technological, managing and other innovations. High competitiveness on the international market even now imposes the need to do the business in the clothing industry more efficiently. Thereupon, in order to be successful, the companies must constantly strive towards the improvements that will result in higher productivity, more rational exploitation of all production resources and cutting down the costs. This means the appliance of the new solutions in the production, but also the changes connected to the information system, management techniques, design and alike.

The aim of the design in textile and clothing industry is composed in encompassing and replying on all needs of the modern man regarding the function and commodity, aesthetics, social and economic factor which are particularly important in the era of the mass number production. To design the products that would be sold in the produced number is a great business philosophy, artful policy and efficient strategy. Only companies that apply the design based on the marketing orientation and directed by the modern management are successful in this. These are the conditions that the company necessarily has to fulfil to exist, grow and develop as an industrial subject. This is the basis of the industrial growth and development in every country, because if the most companies prosper economically, that the industrial progress is provided. The dimension that the design has an influence on the business results and company development will contribute to the overall industrial development.

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MANAGEMENT STRATEGY FOR THE SUCCESSFUL CHANGE MANAGEMENT IN THE MODERN BANK BUSINESS

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Summary: *For an organization, planning represents the process of establishing the objectives and finding out the ways for their accomplishment. Without the plan, managers are not able to efficiently organize people and resources. Liquidity, solvency, security, efficiency, profitability, productivity and economy are frequently mutually opposed, so it is very difficult to adjust them in the best possible way, and that is exactly the task of business policy.*

Keywords: *management strategy, banking,*

1. INTRODUCTION

Banks hold the central position in the scope of financial systems of the country because of the functions they perform as well as the financial potential they posses. Modern banks are multiservice financial institutions which, beside the basic functions, offer much intended assortment of financial products and services to their customers and clients. Bank business under market conditions implies their competitive relation. Every merchant bank strives to have at least some competitive advantage in their performance in regard to other same or similar banks. If banks do not come to an agreement about the conditions for conducting their business for customers and clients, then it is quite common that banks express their competitive advantages through the instruments of their policy.
For an organization, planning represents the process of establishing the objectives and finding out the ways for their accomplishment. Without the plan, managers are not able to efficiently organize people and resources.
Organization management is accomplished with the implementation of two plans. Strategic plans are a general management's product and they define common organizational objectives. Operational plans consist of data explaining the realization of a strategic plan in the process of everyday business. Strategic plans are implemented for relationships among people in an organization and people who work in other organizations. Operational plans refer to people inside an organization.
After the big crisis in 1993, the development of modern theory of merchant bank's policy has started. The collapse of many banks has caused the rise of many questions in the domain of survival and successful business activity of banks. How to survive in the market and how to accomplish the maximal profit with the acceptable risk, how to alleviate the crisis impact, how to preserve the clients' trust and like, are just some of the imposed questions.
We will most easily explain the bank's business policy as a set of measures, actions and instruments directed in such a way that they realize basic banking functions in the most optimal and most efficient way. While implementing the business policy model, we must take into account the fulfillment of basic principles of banking business. Liquidity, solvency, security, efficiency, profitability, productivity and economy are frequently mutually opposed, so it is very difficult to adjust them in the best possible way, and that is exactly the task of business policy.
In drafting and implementing the bank's business policy, we have to take into consideration number of factors which affect bank's business activity:
- The influence of international environment:

- Changes in standards
- Changes in regulations

- Development of international financial markets
- Integrative processes in the world banking
- Innovative processes in the banking

In addition to those mentioned above, there are other influences from the environment that can significantly influence the model of bank's business policy which will be implemented in the bank. In the case of our banking, that influence is expressed in the most brutal way and the results which led to the atrophy of our banking system are evident.

- System conditions through global economic movements on the economy level:

- Economy policy measures
- Financial market development
- Production relations system
- Property relations

- Central Bank measures:

- Conditions for bank establishment and functioning
- Credit-monetary policy measures
- Discount rate policy
- Compulsory reserves policy
- Refinancing policy
- Investment limitation policy and like

- Internal factors, i.e. influences inside the bank:

- Business strategy
- Bank capital
- Business network
- Shareholders structure
- Development perspectives
- Personnel potential

2. STRATEGY OF BANK ADAPTATION TO THE ENVIRONMENT

The bank is an encircled business system and is liable to influences from the environment. Namely, the bank system is affected by changes in the environment, as well as by changes in the very business system of the bank. In order for a bank as an economy subject to meet its objectives in the market economy, it has to provide a synchronized activity in all segments of its business. In order for a bank to accomplish high performances, it is considered that the bank's management team plays an increasing role, if not the crucial role.

3. CHANGE MANAGEMENT STRATEGY

For change management, the bank has to have clearly defined strategy. Change management strategy should read as: *the bank strives to adapt itself to external changes in meeting its objectives by consciously and actively influencing the internal changes.* Among the most significant changes in the external environment we can include: *technological, legal, economic, competitive,* etc.

Change management is a skill which bank managers must attain, and that is:

- Merging the cultures of two banks
- Reorganization of a single bank
- Development of sales and market orientation
- Implementation of strategic planning processes and improvement of employees' performance

4. CHANGE MANAGEMENT PROCESS

Change management is a process that consists of five phases. The first three phases are aimed at identification and diagnosing the needs for changes, while the other two phases are focused at implementing and overcoming the resistance to change.

1. **Identification and representation** – arise under the pressure of external or internal forces for changes, or both. Of special significance is the role of management team that good customers and clients do not leave the bank, auditors and inspectors point to inadequate credit portfolio – credit with losses,
2. **Intervention and reorientation** – is acceptance of changes and searching the way for their implementation and performing a reorientation of the current bank's behavior and activity
3. **Diagnoses and confirmation** – includes a diagnosis of all the symptoms of the problem and requires that management confirms that change related problems physically exist. Management should carry out an efficient action with the aim of defining the needs for changes and presenting the facts
4. **Selection and obligation** – includes the selection of solutions with previously diagnosed problem and creation of obligations for those who must implement those solutions. A deep insight into the heart of changes of the entire bank and the establishment of specific occurrences is required.
5. **Implementation and assessment** – is a final phase and it includes the implementation and assessment of solutions in order to find mistakes in selection and resistance to changes. Management team will not be able to assess the efficiency of changes without first establishing the concrete specific objectives.

5. RESISTANCE AND MIMINIZATION OF RESISTANCE TO CHANGES IN THE BANK

Changes in banks cause rational and irrational resistance by employees. It is considered that there are four most common reasons for resistance to change, those are:

1. **Personal interest** – People will resist changes if they worry that they will lose something valuable
2. **The lack of trust** – Usually arises when people completely don't understand the reason for changes and what are the implications, so they simply resist to change
3. **Different assessments** – Since bank employees see changes differently, they often have different estimates of the situation
4. **Little tolerance to changes** – Bankers who try to build sales orientation, know that people often resist the changes. Little tolerance to change is possible among managers too, who have the resistance toward the changes in order to keep their reputation.

Successful change management in the bank implies that some steps for minimizing the resistance must be taken.
Minimizing the resistance to change can be accomplished by different methods:

- Education and communication
- Participation and inclusion
- Equipment and support
- Negotiation and agreement
- Explicit and implicit corrections
- Manipulation and cooperation

6. ALM STRATEGIES

ALM (asset and liability management) is a modern banking concept of asset and liability management which appeared during the '80s of the last century, in developed market economies where it was also acknowledged in practice.
Changes in the environment in which banks operate have caused the emergence of new concepts in bank management. Financial sector deregulation led to the increased competitiveness among banks as well as to the development of financial market and the emergence of other financial institutions. Therefore, by developing and implementing the marketing concept, the passive banking businesses which were previously considered as purchasing market businesses are becoming the integral part of the investment policy, i.e. banking services offering. Thus, banks lose their previous attribute of being "quasi", and become real and complete financial market institutions.
The developed financial market has enabled banks to perform rapid recomposition of their assets and liabilities, and that was the starting point for the development of new conception. With the simulative acting upon the assets and liabilities, the bank management actively performs the optimization, diminishing the risks and increasing the profit. Thanks to the developed information technology, banks are able to recognize the balance and to perform corrections almost daily in accordance to specific needs. In the developed financial market, it is possible to buy and sell single parts of assets as well as to change the manner in which the liabilities are financed. Therefore, the link between the bank and the financial market is exceptionally significant.

From all the mentioned above, it follows that ALM strategy has enabled banks to change their balance in short terms in the aim of diminishing the risk, increasing the profitability and optimizing the business, as well as appropriate capital adequacy.
In accordance with the strategy and business orientation of the specific bank, we can divide ALM to defensive and offensive or aggressive. Defensive ALM is used when bank wants to minimize the exposure to risks, and with the use of offensive or aggressive ALM on the basis of expected changes, bank accommodates its balance with the aim of achieving as much profit as it can.
In the banks, ALM is implemented in the centralized manner through the Committee for Implementation of ALM. ALCO (Asset and Liability Committee) is composed of bank's top managers and CEOs. ALCO meets once in a week, establishes its position in the market and makes measures in accordance with its predictions of demanded movements, thus we can consider that following are the basic parts of ALM strategy:

- Risk management
- Establishment of the bank's global position
- Explicit assessment of uncertainty with the aim of predicting future events

Risk management, through its recognition and establishment of acceptability of some of them, is the task of ALM.
The risks to which the banks are exposed are:

- Credit risk
- Liquidation risk
- Interest rate risk
- Conditional obligations risk.

Credit risk management is the fundamental task for banking management, when it comes to risk management. Management is obliged to reduce the risk to minimum which it accomplishes through selection of credit demands, limitation of investment amounts, and through investment diversification.
In liquidity risk management, the fundamental thing is to adjust the sources and investments according to the terms, and to regulate all the imbalances with the term transformation of funds.
Interest rate risk management is the bank willingness to respond to interest rate level and structure changes in the financial market, which should result in the increased bank profitability.
Conditional obligations risk management reduces to risks which ensue from the bank's off-balance business. They often appear as risk by given guaranties, avals and like. With conditional obligations, in the end the risk is reduced to interest rate, credit and liquidity risks.
From all the mentioned above, we can conclude the ALM method is flexible and it can be adjusted to different banks. More complex business conditions, increased risks and uncertainty are successfully controlled and surpassed through the use of ALM strategy, and that is acknowledged in practice.
ALM, as banking strategy, successfully corresponds to the conditions of banking marketization and more rapid market changes and newly imposed demands. Therefore, it can be said that introduction and implementation of ALM corresponds to the new or higher developmental banking phase in a more complex context of economic environment and increased risks.

7. CONCLUSIONS

Time, in which we live, is characterized by big changes in all spheres of life. General globalization, development of science and technology, and all other changes could not bypass our country. We are witnesses of big changes and reforms implemented in our economy. A banking system reform is currently in place. Many banks lost their working licenses, and in some, often the biggest ones, administrative measures are introduced and the procedure of their rehabilitation has begun. Several foreign banks have already entered our market and it is certain that some other will follow the suit. A question of withstanding the competition really imposes itself and raises a problem for domestic banks. It is extremely important to set the business policy in a way that it enables the survival and development.
Unfortunately, the characteristics of our banks are following: as a rule, the biggest shareholders are the biggest debtors. There is an excess in labor force in the banking sector, the insufficient market orientation of our banks. The capital basis is spent, the capital structure is inadequate, and like.
The most important role in the bank reform belongs to the Central Bank. The Central Bank influences the formulation of banks' business policy with its measures. In the previous period, the Central Bank's measures were followed with various deformations in all segments so that they couldn't give the real results. The dependence of economy and banks on the Central Bank is created while the Central Bank itself was under big pressure of daily policy. In the most recent period, Central Bank again takes place which belongs to it in the sense of autonomy and independence in conducting the monetary-credit policy.

Planning is a special kind of decision making relating to the specific need of managers for the future of the organization. Planning is not an encircled activity with the clear beginning and the end. The most urgent result of the planning process is strategy which the organization would follow. Strategic management is a special kind of planning which appeared in the last decade. It is a continuous practice of establishing the successful objective programs of the organization and the ways for their realization.
Planning strategy and implementation strategy – components of strategic management are not only the products of specific company manager's vision, but the products of related activities as well. Strategic management hopes that it moves toward the future which it will be able to share with others.
It is completely clear that real and genuine reform of the banking sector can not be performed on the basis of previous experiences we had, i.e. they can serve as an example of how not to conduct the business. Of course, for the successful conduct, i.e. formulation of banks' business policy, all other systematic conditions are also required and this is where the significance of the reformation of banking system is reflected.
Modern bank is a universal type of bank with the broad spectrum of banking services to clients, both individual and cooperative, in the field of domestic and foreign currency business. The basic objective of the bank presented through the business policy is profit while maximally meeting the clients' needs and demands.
It is certain that with this number of banks we have today and with their potential in the international relations, our banking sector doesn't have a serious financial strength, and therefore we can expect a further enlargement of the banks for the sake of rational setting of our banking system.

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МОДЕЛИ СЕТЕВОГО ПЛАНИРОВАНИЯ И УПРАВЛЕНИЯ ЭНЕРГОЕМКИХ ПРОИЗВОДСТВ
MODELS OF NETWORK PLANNING AND MANAGEMENT OF POWER-CONSUMING INDUSTRIES

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Summary: *The transport system of each mine is characterised by an arrangement of transport workings out, types of transport and the accepted technology of work. The choice of a transport type for each link depends not only from mountain-technical specifications, but and from profitability of application of vehicles in the given conditions. Network methods of the theory of integrated operational schedules which allow to find the optimum technological scheme of underground transport can effective used for the decision of such challenges of combinatory character. The choice of such scheme consists of two basic stages: constructions of one integrated operational schedule or a set of integrated operational schedules and search in the constructed integrated operational schedules of a so-called shortest way.*

Keywords: *types of transport, vehicle, of integrated operational schedule, technological schem.*

1. ВВЕДЕНИЕ

Первые методы планирования и управления, использующие сетевые графики, были применены в США в конце 50-х годов двадцатого века [3]. Они получили названия *CPM* и *PERT*. Главным преимуществом этих методов является то, что они позволяют выявить “узкие” места проекта и осуществить необходимое перераспределение имеющихся ресурсов. В Украине работы по сетевому планированию начали внедряться с 60-х годов. Тогда методы *CPM* нашли применение в строительстве и научных разработках. В дальнейшем сетевые методы стали широко применяться и в других областях народного хозяйства. Характерной особенностью перечисленных разработок и проектов является то, что они состоят из ряда отдельных, элементарных работ, которые определенным образом зависят одна от одной так, что выполнение работ не может быть начато раньше, чем будут завершены предыдущие работы. *CPM* основан на моделировании процесса с помощью сетевого графика. Он является совокупностью расчетных методов, организационных и контрольных мероприятий по планированию и управлению комплексом работ, например при выборе оптимальных видов транспорта производственной системы.

2. ТЕХНИЧЕСКИЕ ОПИСАНИЕ

Пути оптимизации параметров транспортного оборудования и технологической схемы перемещения различных грузов энергоемких производств рассмотрим на примере сложных условий горных предприятий, которые осуществляют добычу полезных ископаемых подземным способом. Транспортная система каждой шахты характеризуется расположением транспортных разработок, видами транспорта и принятой технологией работы [6]. Конфигурация сети подземных транспортных разработок, которые соединяют очистительные и подготовительные забои со стволом и поверхностью, зависит от количества, длины и взаимного расположения горизонтальных и наклонных разработок, а также от количества и расположения погрузочных и обменных пунктов. Схема транспортных разработок шахты определяется конкретными горно-геологическими и горно-техническими условиями месторождения в зависимости от следующих факторов:

- количества одновременно разрабатываемых пластов и их угла наклона;
- мощности и газоотведения;
- размеров шахтного поля;
- схемы подготовки;
- системы разработки и порядка отрабатывания пластов;
- количества, расположения и производительности очистительных и подготовительных забоев.

В связи с разнообразием горно-геологических и технических условий угольных месторождений схемы транспортных разработок могут быть разные. Схема разработок каждой действующей шахты имеет свои индивидуальные особенности, хотя часто имеют и общие признаки, которые характеризуют в основных чертах тип схемы. К таким признакам в первую очередь относят:

- ступенчатость, которая связана с наличием наклонных разработок между горизонтами разработок;
- разбросанность или компактность схемы из-за концентрации горных работ;
- однолинейность или разветвленность расположения горизонтальных разработок на основных горизонтах.

Технологическая схема подземного транспорта, обусловливается средствами транспорта, которые применяются на отдельных и последовательных звеньях и их стыках. При этом выбор вида транспорта для каждого звена зависит не только от горно-технических условий, (пылевого и газового режимов, угла наклона разработок, размеров грузопотока, длин транспортировки), а и от экономичности применения транспортных средств в данных условиях. Даже при одинаковых схемах расположения разработок технологические схемы транспортировки могут быть разными. На одних и тех же горизонтальных разработках может быть применен конвейерный и локомотивный транспорт, причем в первом случае транспорт может осуществляться ленточными, цепными и другими типами конвейеров, а в другом - электровозами или дизелевозами с вагонетками. При одинаковом виде локомотивного транспорта может быть применена разная технология и организация его работы. На одних и тех же наклонных разработках могут применяться конвейеры разных конструкций или канатный откат и т.д. При чем по мере развития техники будут создаваться новые виды транспорта, которые еще больше расширят возможности выбора технологической схемы подземного транспорта.

При разнообразных средствах рельсового или конвейерного транспорта в одних и тех же условиях могут быть применены разные виды транспорта, близкие по производительности, но неравноценные в экономическом отношении. Большое значение для каждой шахты имеет установление оптимальной технологической схемы подземного транспорта, которая обеспечила бы наилучшие технико-экономические показатели работы всего внутришахтного транспорта.

Рекомендации об областях наиболее эффективного применения разных видов транспорта, которые приводятся в литературе [4, 5], базируются на сопоставлении технико-экономических показателей сравниваемых транспортных средств при работе только в пределах одного участка или крыла, без учета связи со всей транспортной системой шахты. Такие рекомендации в наиболее распространенных случаях, при большом количестве транспортных звеньев и не дают возможности установления параметров транспорта по шахте в целом. Часто какой-либо вид транспорта, наивыгоднейший на одном участке, на другом участке при объединении с другими видами транспорта может оказаться менее экономическим. Поэтому для установления оптимальной технологической схемы подземного транспорта с учетом особенностей всей шахты нельзя ограничиваться выбором наивыгоднейшего вида транспорта для каждого участка отдельно, а необходимо рассматривать транспортные средства в их взаимосвязи и относительно конкретных условий. Комплексное рассмотрение всей транспортной схемы шахты требует перебора и сопоставление многочисленных технически допустимых вариантов, число которых зависит от количества транспортных участков на шахте и сравниваемых видов транспорта.

Для решения такого рода сложных задач комбинаторного характера эффективно могут быть использованные сетевые методы теории графов, которые позволяют выбрать из большого числа сравниваемых вариантов экономически наиболее удобную технологическую схему подземного транспорта [1].

В общих чертах выбор оптимальной транспортной системы сетевыми методами теории графов [2, 4] состоит из двух основных этапов:

- построения моделей графов, которые отображают конкретные схемы транспорта;
- выявление оптимального решения, т.е. отыскание в построенных графах так называемого кратчайшего пути.

При этом применяются такие данные:

- схема транспортных разработок шахты;
- виды транспорта на горизонтальным и наклонных разработках, выбранные для сопоставления;
- экономические показатели, которые характеризуют все сравниваемые виды транспорта в рассмотренных конкретных условиях.

В угольной промышленности Украины в основном разрабатываются пологие пласты. При разработке этих пластов в большинстве случаев транспортировка угля осуществляется не только вдоль горизонтальных, но и вдоль наклонных разработок. Обычно путь угля от погрузочного пункта лавы к стволу проходит сначала по штреку, расположенному,а дальше - по горизонтальным разработкам и пиствольному двору. Схема транспортных разработок шахты, которая разрабатывает пологие пластов, состоит из горизонтальных и наклонных разработок, объединенных в единую сеть, которая связывает со стволом очистительные и подготовительные забои разных горизонтов.

Для выбора методики установления оптимальных технологических схем подземного транспорта для шахт с пологими пластами рассмотрим упрощенную схему транспортных разработок (рис. 1). Шахта имеет три лавы: лаву 1, уголь из которой транспортируется по штреку 1, восточному уклону и восточному коренному штреку, и лавы 2 и 3, уголь из которых транспортируется сначала соответственно по штреку 2 или 3, а потом по западному уклону и западному коренному штреку. Все звенья подземного транспорта обозначенные на схеме такими номерами: погрузочные пункты лав - l, 7 и 10, площадки для приема угля с наклонных разработок - 3, 5, 9, 12 и 14, горизонтальные и наклонные разработки - 2, 4, 6, 8, 11, 13 и 15, приствольный двор - 16,

Поставка задачи: ***в какой технологической схеме подземного транспорта эксплуатационные затраты на транспортировку в рассмотренных условиях будут минимальными.***

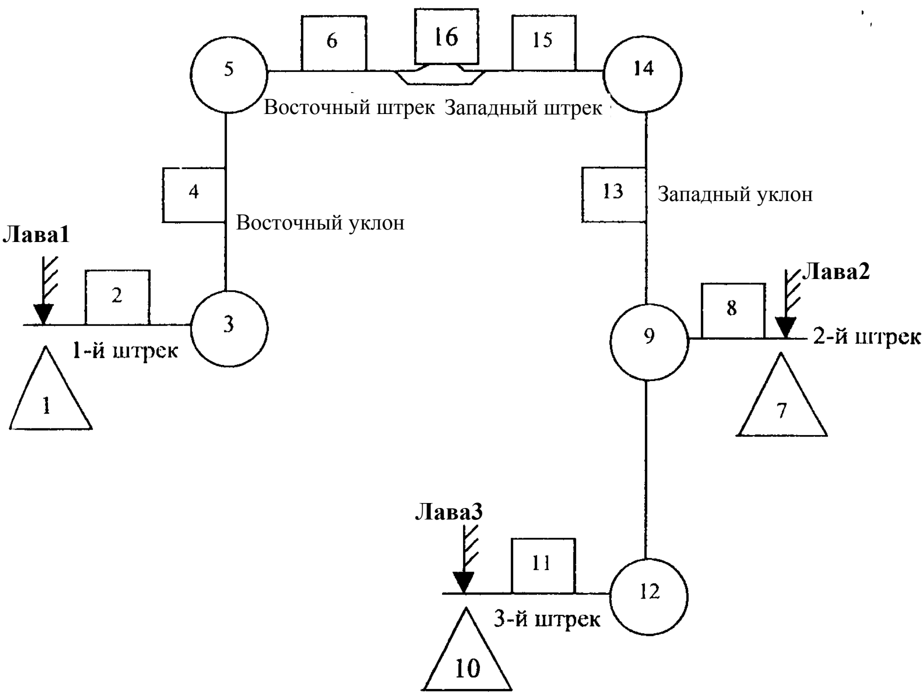

Рисунок 1: Схема транспортных разработок

Для сопоставления выбраны такие виды транспорта:

- на горизонтальных разработках — электровозний транспорт, конвейерный транспорт и транспорт бункерными поездами;
- на наклонных разработках — конвейерный транспорт, канатный откат вагонеток и скиповый транспорт;
- на основных горизонтальных разработках — конвейерный транспорт и электровозный откат.

Для разных сравниваемых видов транспорта были рассчитаны эксплуатационные затраты в звеньях, а результаты расчетов привены в виде таблиц 1 и 2.

Таблица 1: Эксплуатационные затраты на горизонтальных звеньях

Транспортные звенья	Электровозы	Конвейеры	Бункерные поезда
Погрузочный пункт *1*	280	180	0
1-й штрек	440	960	940
Восточный коренной штрек	890	2080	-
Погрузочный пункт *2*	280	180	0
Промежуточная площадка западного уклона при транспортировке по 2-му штреку	880	1180	940
Погрузочный пункт *3*	280	180	0
Нижняя площадка западного уклона при транспортировке по 3-му штреку	440	680	940
Западный коренной штрек	1350	1960	
Приствольныйдвор при транспортировке на горизонте электровозами или конвейерами	800	520	-
Приствольный двор при транспортировке на одном крыле электровозами, а на другом - конвейерами	620	620	

Выбор оптимальной технологической схемы подземного транспорта состоит из двух основных этапов: построения одного графа или набора графов и отыскание в построенных графах так называемого кратчайшего пути. Транспортные звенья (рис.1), кроме приствольного двора 16, разбиваем на две части — восточную и западную. Для каждой части строим по одному графу и для объединения зональных графов еще один граф, который назовем объединительным.

Таблица 2: Эксплуатационные затраты на наклонных звеньях

Транспортные звенья	Канатный откат	Конвейеры	Скипы
Нижняя площадка восточного уклона при транспортировке по 1-му штрека:			
- электровозами	250	320	32
- конвейерами	-	150	300
- бункерными поездами	-	40	3000
Верхняя площадка восточного уклона при:			
- транспортировке по восточному коренному штреку	300	620	420
- электровозами	460	320	410
- конвейерами	-	210	270
Промежуточная площадка западного уклона при транспортировке по 2-му штреку:			
- электровозами	280	320	320
- конвейерами	-	150	300
- бункерными поездами	-	40	300
Нижняя площадка западного уклона при транспортировке по 3-му штрека:			
- электровозами	250	320	320
- конвейерами	-	150	300
- бункерными поездами	-	40	300
Верхняя площадка западного уклона при:			
- транспортировке по восточному коренному штреку	320	680	440
- электровозами	520	380	470
- конвейерами	-	210	270

Зональный граф восточного крыла, которое охватывает транспортные звенья 1-6, начнем из погрузочного пункта *1* и первого штрека (звена 1 и 2). Из левой стороны этого графа (рис.2) нанесем одну под другой три начальные вершины, которые обозначают принятые для сравнения три вида транспорта по штрекам (электровозный откат *Е*, конвейерный транспорт *К* и транспорт бункерными поездами *Б*).

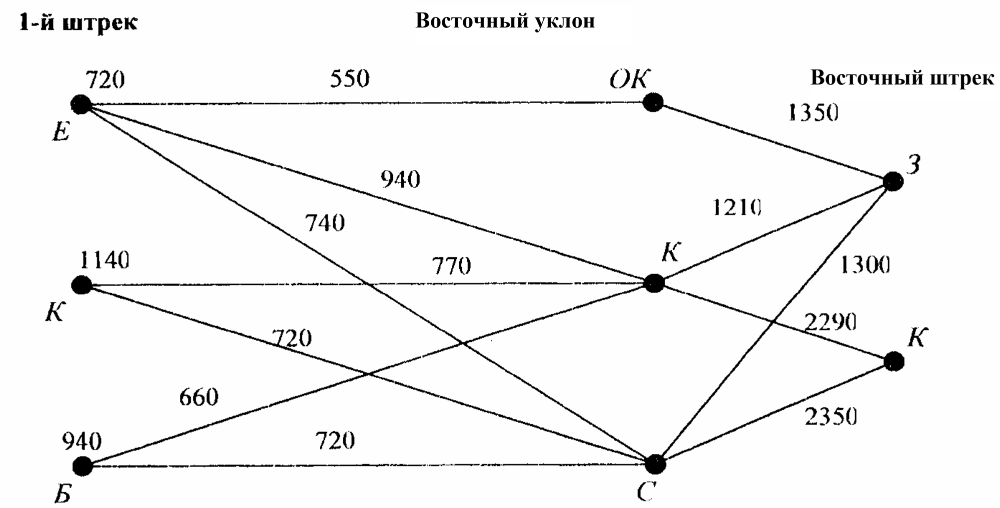

Рисунок 2: Граф восточной части шахты

Над каждой вершиной записываем сумму транспортных затрат на обслуживание погрузочного пункта *1* и транспортировку по первому штреку при тех же видах транспорта, который обозначает каждая вершина. Над вершиной *Е* из данных таблицы 1 соответственно записываем: *720 = (280 + 440)*, над вершиной *К*: *1140 =(180 + 960)* и над вершиной *Б*: *940=(0 + 940)*

Над каждой дугой записываем сумму эксплуатационных затрат («длину») по участкам 3 и 4, обозначенных вершинами.

Построение зонального графа западного крыла, как и предыдущего графа, начнем из транспортных звеньев, которые непосредственно обслуживают лавы. В отличие от восточного уклона, к западному уклону примыкает не один, а два штрека, которые связывают его с лавами. Поэтому каждая начальная вершина зонального графа западного крыла должна отображать вид транспорта не по одному штреку, а возможное соединение видов транспорта в обеих штреках, которые примыкают к западному поклону, т.е. в штреках 2 и 3. В нашем примере при трех сравниваемых видах транспорта ($m = 3$) и двух штреках ($n = 2$) количество возможных вариантов таких соединений будет: $m^n = 3^2 = 9$, а именно:

- на обоих штреках электровозныйоткат;
- на штреке 2 электровозный откат, а на штреке 3 - конвейерный транспорт;
- на штреке 2 электровозныйоткат, а на штреке 3 - транспортировка бункерными поездами;
- на обоих штреках - конвейерный транспорт и т.д.

Зональный граф западного крыла изображен на рис.3.

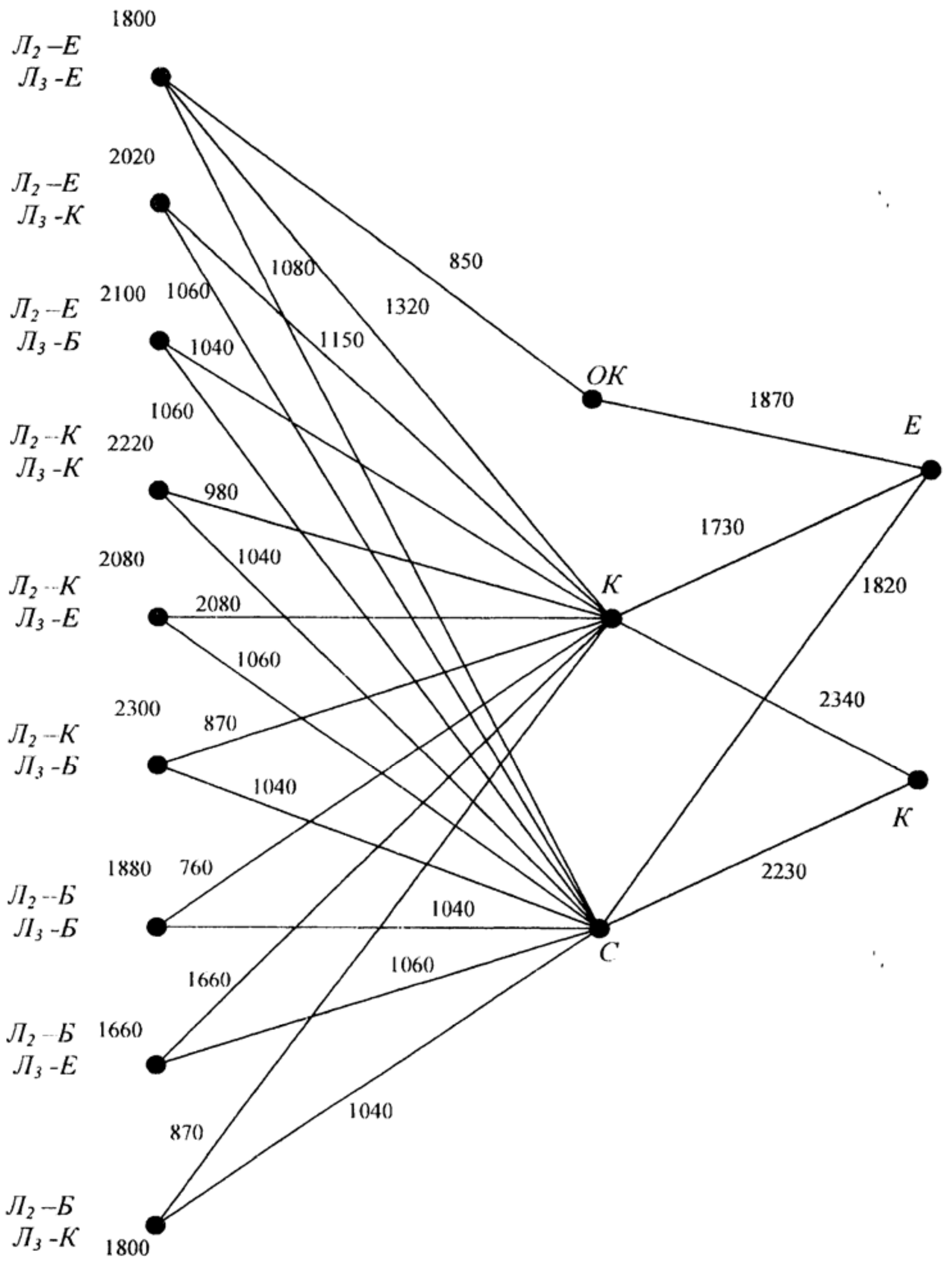

Рисунок 3: Зональный граф западной части шахты

Конечными вершинами зонального графу являются две: первая обозначает электровозный откат по западному коренному штреку, а вторая - конвейерный транспорт по этому штреку. Они соединяются дугами с промежуточными вершинами, которые обозначают тот вид транспорта по уклону, с которым может соединяться электровозный и конвейерный транспорт по западному коренному штреку. Над этими дугами записываем суммарные эксплуатационные затраты на обслуживание верхней площадки

западного уклона и на транспортировку по западному коренному штреку при соответствующих видах транспорта.
После построения двух зональных графов приступим к построению объединительного графа (рис.4).

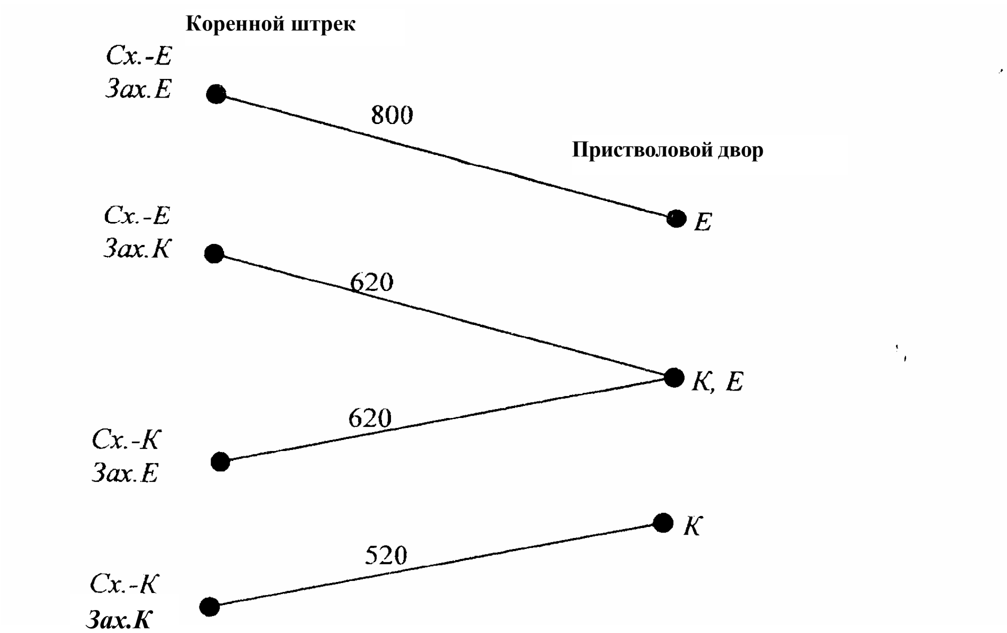

Рисунок 4: Объединительный граф по шахте

Над каждой дугой записываем эксплуатационные затраты на транспорт непосредственно в приствольном дворе: при электровозном откате (верхняя дуга), при комбинированном транспорте (вторая и третья дуга) и при конвейерном транспорте (нижняя дуга). Если решать задачу не для действующей шахты, а для проекта строительства новой или капитальной реконструкции существующей шахты, то объединительный граф можно заканчивать не только видами транспорта в приствольном дворе, но и видами подъема, которые сопоставляются, по стволу и транспорту на поверхности.
На этом заканчивается первый этап задачи относительно выбора оптимальной технологической схемы подземного транспорта для условий рассмотренного примера - построение набора графов.
Второй этап состоит из оценки за минимумом вершин с дугами, которые заходят в эти вершины, оценки соответствующих вершин и отыскание «кратчайшего пути», т.е. со всех тех операций, которые рассмотрены в предыдущем случае.
В результате анализа была получена оптимальная технологическая схема, которая состоит из транспортных участков, представленных в таблице 3.

Таблица 3: Оптимальная технологическая схема транспортных участков

Разработка	Вид транспорта
Штрек 1	Электровозный откат
Штрек 2	Транспортировка бункерными поездами
Штрек 3	Транспортировка бункерными поездами
Восточный коренной штрек	Электровозный откат
Западный коренной штрек	Электровозный откат
Восточный уклон	Одноконечный откат
Западный уклон	Конвейерный транспорт

3. ЗАКЛЮЧЕНИЕ

По условиям примера (таблицы. 1 и 2), наиболее дорогим видом транспорта по штреку 3 являлся транспорт бункерными поездами, а по западному уклону - конвейерный. Эти виды транспорта при соединении со всей схемой оказались на этих же разработках наиболее удобные. Из этого примера видно, что разные виды транспорта нельзя экономически сравнивать между собой только в пределах одной разработки без увязывания их со всей технологической схемой транспорта.

Описанные способы построения графов охватывают наиболее распространенные варианты схем подземного транспорта шахт, которые разрабатывают пологие пласты.

Приведенные затраты конкурирующих видов и средств основного и вспомогательного транспорта, рассчитанные согласно описанной методике, используются при построении моделей графов систем внутришахтного транспорта и решении задач, связанных из их оптимизацией по критерию затрат на транспортировку грузов.

Оптимизация по принятому критерию технологических схем подземного транспорта для действующих шахт может проводиться как по состоянию на момент составления соответствующих графов, так и на будущие периоды.

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NEW TECHNOLOGIES OF QUALITY COSTS MANAGEMENT IN THE CONDITIONS OF WORLD FINANCIAL CRISIS

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Summary: *Considering world financial crisis the environment of an enterprise is changed towards internationalization and globalization of the world market and also market segmentation and raising of possible business environmental risks and uncertainty. This causes the transformation of organizational structure of an enterprise, changes in logics of managing quality costs and its instruments. Required information about costs is rising and new forms of competition are created. All mentioned factors generate problem known as maintaining quality costs in optimum level. Changed business environment as a result of the world financial crisis, needs new ways of managing quality costs and of course new instruments for managing it. There are great number of managing costs instruments so considered this topic we have chosen particularly one concept of managing quality costs regarding aspects of both compatibility of and design of quality and its seven-phase application considering world financial crisis.*

Keywords: *quality compatibility, quality design, costs, financial crisis*

1. INTRODUCTION

Customers become more and more intolerant with poor quality and long delivery in question. Companies that fail to reach the quality and timeliness bear the high costs, put their business under significant risk in the conditions of world financial crisis. To satisfy the customers and to be competitive, managers need to find cost-optimal way to improve the quality of their products and shorten the time of delivery.

International quality standards are getting wider. For example, ISO 9000, which was, at the end of the last century, developed by the International Organization for Standardization, established five international standards for quality management, accepted in more than 100 countries. ISO 9000 is designed to enable companies to document and verify the elements of their own quality system. In order to ensure that their suppliers deliver high quality products by competitive costs, some companies require their suppliers to obtain ISO 9000 certificate. In accordance to that, the certification and emphasizing of quality rapidly becomes a condition for competition in the global market.

In the early stage of cost accounting development, which is characterized by poorly developed company with low technical equipment, with the prevailing participation of the cost of materials and direct labor costs in the total costs, the problem of cost management quality was not set.

Development of economy in general has led to the formation of large companies that is characterized by a wide range of product sales, high investments, robust administrative device etc. World financial crisis and changes in the company's environment have brought to question the classic management instruments. In these conditions, traditional methods of quality costs become nonfunctional.

Contemporary production in conditions of financial crisis is characterized by a wide range of products and more intensive use of the machine on account of direct production of goods and services. Costs of production, due to automation and robotization, have a tendency to decrease. The increase of cost of quality is the result of increasing costs of preparation and costs of control of production process.

Contemporary economic literature thoroughly explores the causes of a new concept of the cost in condition of world economic crisis. The main causes are seen in the following.

- production of small series for satisfying segment and the specific demands of the market,
- the need of introducing new methods of work organization and operations and
- implementation of new production and information technologies.

Cost calculation and financial accounting have different approaches in solving the problem of quality costs. Financial accounting deals with the cost of quality as a single mass, and the production process as an indivisible whole. Accordingly, the allocation of quality costs to the costs carriers are based on a unique key. In financial accounting, conditional database and the key to quality costs allocation are reduced to the unique indicators of the level of activity in the form of direct work hours, scope of modified material, the volume of income or single indicator of total direct expenditures.

Although the quality of relations in a wide range of factors, such as suitability for use, customer satisfaction and the degree to which the product complies with designer instructions and engineering requirements, we will, in today's economic conditions of the financial crisis, focus on two aspects of quality: quality of design and quality compliance.

Important issue is how to measure quality costs. First, we will review the case of quality compliance.

2. QUALITY COMPLIANCE COSTS

Quality compliance refers to the work of product or service with regard to its design and product specification. For example, if photocopier machine is poorly handled, or has been breaking down, it failed to meet quality compliance. Product that is not in compliance with the instructions must be repaired, re-processed or given to the trash with additional costs for the company. If errors in compliance still remain after the product is delivered and the product is broken with the customer, that can result in higher repair costs and loss of customer good will - often the highest of quality costs. In banking the depositing of client's check to the wrong account is an example of the lack in the quality compliance.

Quality compliance costs are related to expenses incurred to prevent, or costs derived as a result of production of non-quality products. These costs focus on the quality of compliance and result in all business functions of value chain. Quality compliance costs can be classified into four categories:

1. Prevention costs - costs incurred to prevent production of products that are not in compliance with the specification,
2. Cost of estimation - costs incurred in discovering that individual units of the product is not in compliance with the specification,
3. Internal failure costs - costs incurred in incompatible product before its delivery to customer,
4. External failure costs - costs incurred in incompatible product after its delivery to customer.

Chart 1 is the example of individual items of quality costs in each of these four categories, delivered to the QC report. We may notice that the items included in the chart 1 come from all business functions of value chain and are wider than the costs of internal lack based on garbage, re-processing and waste in production.

Chart 1: Items related to costs in the reports on quality

Prevention costs	Cost of estimation	Internal failure costs	External failure costs
Design engineering	Control	Garbage	Customer support
Process engineering	Online product production and the process control	Reprocessing	Transport costs
Quality engineering	Product testing	Waste	Production / process engineering
Supplier rating		Maintenance (breakdowns)	The costs of repair in the warranty period
Preventive maintenance of equipment		Production / process engineering of internal failures	Compensation requirements
Training on quality			
New materials used for the production of products			

3. QUALITY OF DESIGN COST

Quality of design costs is related to the expenses incurred to prevent, or costs that are a result of poor quality design. These costs include the cost of designing products, production costs, marketing, distribution and services lost to the poorly designed products support. Significant component of these costs is optional cost of lost sales from not producing the product that the customers want. Many of these costs is very difficult to accurately measure. For this reason many companies do not measure the financial cost of the quality of design.

To evaluate how the actual work meets the customer's needs, companies supplement the available financial measures with non-financial measures of quality of design and quality compliance. Non-financial measures are useful in the demonstration of future needs and desires of consumers and pointing out specific areas that should be improved. Therefore, non-financial measures of quality are a useful indicator of future long-term activities, as opposed to financial measures of quality that are short-term focused. Managers are often responsible for the maintenance and presentation of these non-financial measures. We will firstly focus on the non-financial measures in meeting the needs of customers (which includes non-financial measures of quality of design and external defects) and then to measure the internal work (including measures of prevention, assessment and internal deficiencies).

Some of the non-financial measures of tracking in order to meet the needs of customers are:

- Information on testing the market of customer needs and meeting their needs with the specific characteristics of the product;
- Number of defective units delivered to customers as a percentage of total units delivered;
- Number of customers complaints (companies estimate that for every customer who actually complains, there are 10-20 others who have bad experience, but do not complain);
- Percentage of products that have early or frequent failure;
- Delays in delivery (the difference between the schedule of delivery and the buyers desired date of delivery);
- Rate of timely deliveries (percentage of deliveries made before the date or schedule for delivery).

Management examines how these parameters deviate over time. If these parameters improve over time, management may have more belief that operating profit will be higher in future years.

In addition to the routine non-financial measures, many companies carry out research for measuring customer satisfaction. This research serve two goals. First, they provide a deeper insight into the experience and wishes of customers. Second, they ensure overview of features that customers would like to have a future product.

In order to meet their customers needs, companies need to continually improve the quality of their production. Companies use the cost of prevention, assessment and internal shortcomings for measuring the quality of work within the company in financial terms. However, many companies complement these financial measures with non-financial measures of internal quality.

The company usually follows the trends in these measures of quality:

- Number of write-offs for each production line;
- The benefit of the process (ratio of the correct output to total output);
- Trends (turnover) of employees (ratio of number of employees who left the company according to the total number of employees).

Many companies go further and attempt to understand the factors which lead to better internal quality. For example, many companies measure the power of employees and satisfaction of employees as managers in these companies believe that these measures are important determinants of quality.

- The measure of power of the employees is the ratio of number of the processes in which employees have the right to make decisions without consulting with superiors, to the total number of processes;
- The measure of satisfaction of employees is the relationship of employees that provide a high level of satisfaction in the survey of employees, and the total number of employees, who participated in the survey.

For a reporting period of non-financial measures of quality have limited meaning. They are more informative when managers explore the trends over time. In order to secure clear information, a manager must review non-financial measures from the standpoint of accuracy and consistency. That's how the manager helps the company to improve quality in a variety of ways - calculating the cost of quality, helps in the development of cost-productive solutions for the problems of quality and provides feedback on the improvement of quality.

4. ADVANTAGES OF FINANCIAL AND NONFINANCIAL QUALITY MEASURES

Measuring the quality of financial costs and non-financial aspects of quality have different advantages.

Advantages of financial QC quality measures:

1. In accordance with the role of managers in terms of directing attention, financial measures of quality focuses attention on how poor is the quality.

2. Financial quality measures help in solving the problem of comparing the different programs for improving quality and establishing priorities to achieve maximum cost reduction.
3. Financial quality measures serve as a common denominator for the assessment of substitution between cost constraints and lack of cost. Financial quality measures provide cumulative measure of the quality of work.

Advantages of non-financial measures of quality are:

1. Non-financial measures of quality are often easy for quantification and understanding.
2. Non-financial measures focus the attention on the physical processes and focus attention on the exact problem area that should be improved.
3. Non-financial measures immediately provide short-term feedback about whether efforts to improve the quality manage to improve it.
4. Non-financial measures are a useful indicator of future long-term execution.

Financial measures and non-financial measures are supplementary. Most companies use both in order to achieve the quality of work. Some companies, for instance, estimate employees and individual franchises by using multiple measures of quality and customer satisfaction. Mystery buyer - a party that is engaged by company itself, to visit it's shop - rates each store by the quality, purity and service. Work of each store is then assessed over time and compared with other shops.

5. QUALITY COSTS MANAGEMENT IN PRACTICE

We will illustrate different issues in the management of quality in the conditions of world financial crisis - from the calculation of quality costs, identifying problems in quality to the action of improving quality - using the example of "Metalopromet". The company "Metalopromet" produces more types of products. Our discussion focuses on the milling machines, which achieved operating income of 24 million n.j. with the income of 300 million n.j (20,000 machines) over the year. "Metalopromet" determines the cost of the quality of their mill machines using seven-phase approach to calculating costs based on activities. Seven-phase approach represents a new technology in the costs management.

Phase 1: Identify the selected cost object - Cost object is 20,000 machine, which is produced by "Metalopromet". The aim is to calculate the total cost of the quality of these machines.

Phase 2: Identify the direct costs of products - machines do not have a direct cost of quality.

Phase 3: Select the basis for the allocation of costs for use in the distribution of indirect costs of products quality – Column 1 on Chart 2, Panel A, classifies the activities that result in the costs of prevention, assessment, internal failures and external failures and point to the business functions of value chain in which the costs occurred. For example, control activities result in cost estimates and occur in the production function. Metalopromet chose the number of hours for control, rather than the number of controls as the basis for the allocation of costs for control activities, since control hours have better relationship with the cause-consequence cost control. To avoid the details will not give information about the total quantities of each of the basis for the allocation of costs used in all operations and business.

Phase 4: Identify indirect costs associated with the quality of every basis for the allocation of costs - there are total costs (fixed and variable) incurred in any of the costs of quality activities, such as control in all operations. To avoid the details, we will not give information about the total costs.

Phase 5: Calculate the rate per unit of any basis for the allocation of costs, used for the allocation of indirect costs to the quality of the product for each activity, total costs calculated in Phase 4 will be divided with the total amount of the basis for allocation (calculated in Phase 3) in order to calculate rates per unit for each of the distribution costs.

Column 2 in Chart 2, Panel A, shows these rates (without the follow-up account).

For example, “Metalopromet” calculates the rate of 10 N.J. per hour for the activity of control by sharing the cost control in all operations to control the total amount of hours for all operations.

Phase 6: Calculate the indirect costs of the quality allocated by the product. "Metalopromet" determines quantity of each of the basis for the allocation of the cost used by milling machines. These amounts are shown in column 3 of chart 2, Panel A. For example, determined that the mill machine uses 240,000 control hours. Column 4 shows the indirect quality costs of milling machines. For calculating these cost, total amount of the basis for the allocation of costs used by the milling machine for each activity, should be multiplied by the rate of distribution costs in phase 5 (column 2). For example, control costs related to the quality of milling machine amounts to 9,600,000 (10 n.j. per hour x 240,000 control hours).

Phase 7: Calculate the total quality cost by adding all direct and indirect costs associated with the product quality - Chart 2, shows the total cost of quality in the QC report for machine mill of 40.02 million, of which the largest category of 14:52 million is for the total cost of external failures, and 10 million for the total cost of internal failures - a total of 24.52 million. Total quality costs of milling machine is 13:34% the amount of current income.

Total quality costs usually displayed in the QC report exclude some important items in the cost of quality. QC report usually does not consider possible costs, such as contribution margin and profit from lost sales, lost production or lower prices that result from poor quality. Possible costs are excluded because they are difficult to estimate and are not booked in the accounting system. However, possible costs can be a significant bearing force in improving the quality. Chart 2, Panel B, presents the analysis of the possible cost of poor quality. Sector of market research estimates lost sales in 2000 machines due to external failures. Missed contribution margin and operating income of 12 million shows the financial costs of unpleased customers who have returned the machine and the lost sales due to problems with the quality. Total quality costs (including possible costs) amounted to 52.02 million (40.02 million in Panel A and 12 million in Panel B), or 17:34% of current income. Possible costs amounted to 23% (12 milions/52.02 million) of total quality costs. QC report and analysis of possible costs emphasize the large costs of internal and external failure. In order to reduce costs to establish the quality, "Metalopromet" must identify and reduce the defects that appear as problems concerning the quality.

Chart 2: Analysis of quality costs based on the of activities for the mill machine in the company "Metalopromet"

Panel A: QC REPORT

Categories of quality costs and the value chain (1)	Basis for the allocation or costs carrier: Rate (the assumed amount) (2)	Amount (3)	Total costs (4)=(2)x(3)	Income percentage (5)=(4) / 300.000.000
Prevention costs				
Design engineering	80 per hour	40.000 hours	3.200.000	1,07%
Process engineering	60 per hour	45.000 hours	2.700.000	0,90%
Total prevention costs			5.900.000	1,97%
Estimation costs				
Control (production)	40 per hour	240.000 hours	9.600.000	3,20
Total estimation costs			9.600.000	3,20
Internal failure costs				
Reprocessing (production)	100 per hour	100.00 hours	10.000.000	3,33
Total internal failure costs			10.000.000	3,33
External failure costs				
Customer support (marketing)	50 per hour	12.000 hours	600.000	0,20
Transport (distribucija)	240 per transport	3,000 transports	720.000	0,24
Repair in the warranty period (services)	110 per hour	120.000 hours	13.200.000	4,40
Total external failure costs			14.520.000	4,84
Total quality costs			40.020.000	13,34%

Panel B: ANALISIS OF POSSIBLE COSTS

Categories of quality costs (1)	Total estimated loss of contribution margin (2)	Sales percentage (3)=(2) / 3.000.000
Costs of external deficiency		
Estimated missed possible margin and profit from lost sales	12.000.000[b]	4,00%
Total quality costs	12.000.000	4,00%

[b] Calculated as the total revenue minus all variable costs (any output unit, series, sustainable product, or sustainable means) of the loss of sales.

6. CONCLUSION

Management of quality costs in the changed business conditions can not be reduced only on their allocations, but also to find opportunities for their control and reduction. A significant step in the management of quality costs in condition of world financial crisis lies in the development of models that provide the link between costs and causes of their development. New approach is based on the activities as a cause of quality costs. Key to quality costs management is the control of activities that they run.

Traditional concept of quality costs, which is related to the phases of production, sales and service and maintenance of products, does not match the requirements of managing companies during the world financial crisis.
Finished product is in any case, in the conditions of world financial crisis, a key object for the design of the new cost of quality, because it is the natural link between the market and companies, and at the same time the basis for the achievement of result. Its life cycle is the time horizon to which the meaning of a new concept of quality costs extends. Since the design, planning, production and selling the products contacts all business activities, the new concept of quality costs is the basis of negotiations and cooperation of all functional areas of companies.
Cost of quality according to the starting point, represents an important link in the process of managing each product, and through this the company as a whole. This is actually a system of strategic management in the conditions of world financial crisis.
Quality cost was in this paper looked at two aspects, compliance quality and quality of design, in which these important segments of the cost were displayed in their original form.

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THE SUCCESS OF MANAGERS (FACTORS RELEVANT TO SUCCESS – AN EMPIRICAL STUDY CONDUCTED IN MONTENEGRO)

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Summary: *In modern times, where competition is more and more significant, the manager role is more and more important. Nevertheless, not only developed managers attain more importance, but also other employees in the organization. Accordingly, multiple acting is provided in the field of inter-human relations, and therefore needful team work. The management is successful if the managers are successful to provide efficient and effective application of all functions, at all levels, respecting available resources and environment. The application of modern principles of management is the special challenge for transition countries. Firstly, it is necessary to change the mentality, and the philosophy of living, which is not easy job to fulfil. It is not enough to change only the system (organization, laws...), but all this have to be realized as well. That is possible, if the level of knowledge is increased in general, but also the level of knowledge of managers themselves. Only by applying modern principles of management, one organization could be successful. In this work, only one part of empiric research is given, which is focused on some of the factors ("managers` capabilities", "cooperatives` capabilities", "situations that occurs to managers", "management levels", "control aperture") that have influence on organization success. The research results show that successful managers "connect" their results with their own capabilities, what is expected and normal. One successful manager, no mater where he works, will always be successful, if needed, particularly because the successful manager, the structure of number of management levels is positive from the aspect of decision efficiency. The importance of number of management levels is insufficiently comprehended, in comparison to effectiveness, and additionally, there is not enough information or knowledge, according to which one can decide for factors that influence on control aperture. The constant education and improvement of managers is the base for successful work. This is particularly important for Montenegrin managers, especially since they do not have enough experience in doing business on the market manner.*

Key words: *management, management analysis, processes*

1. INTRODUCTION

Assuming that management is effort to achieve the desired future, taking into account both the past and the present, management is of crucial importance in the achievement of defined targets. Management is a need important in all countries. It is particularly important in countries that are in the process of transition towards the achievement of their micro and macro goals. Also, management is significant to companies equally as to the highest levels of state authorities.
Management is a process of planning, organization, coaching, managing human resources, control of the work of members of an organization and use of all available resources of the organization in order to achieve the planned objectives.
In the present times, with competition becoming stronger and stronger, the role of managers is given not only to the established managers but also to other employees in an organization. That ensures multiplicity in acting in the field of interpersonal relations and necessity for team work.
Management is successful to the extent managers are able to provide an efficient and effective performance of all functions, at all levels, appreciating the available resources and the environment.
A manager, depending on day-to-day problems devotes his time, from hour to hour, to the management functions. Also, how much time will be given to individual functions by a manager depends on the management level. Top management will spend most of their time to planning and organizing, middle management is focused

on organizing and leading, while first-line management is mostly oriented to leading employees towards the achievement of goals.
The primary skill of a manager is to select specific areas to become involved in, which will contribute to the achievement of highest impacts on operating performance. It is a job on which a manager is faced with more issues and opportunities than he can personally address. The manager decides whether more time will be dedicated to the determination of a strategy (planning) or human resource development or any other function. It is critical to know what should be a priority, and when, what and to whom it should be delegated.
For the successful performance of managerial duties, it is necessary to have knowledge and skills and provide conditions for continued advanced training. Knowledge, not only of managers but of all employees, is a basis of further growth and development of a company or organization.
In their work, managers must be leaders to a certain extent, because successful operation of a company requires successful leaders.
There are few topics today that attract so much attention and interest as leadership. It is one of the most difficult tasks that a manager may efficiently fulfill. In the earlier times, the need for leadership at all management levels was not so big as today. The essence of leadership is in guiding the behavior of followers towards the completion of a task.
How much Montenegrin managers apply these principles? Answer to that question was sought for through the outcome of our study. The outcome has shown that managers in Montenegro must pay more attention to these principles in future in order to make their operation more efficient and more effective.
For the purposes of this paper, we have presented the impact of only a part of factors on the management success. The paper presents a part of the empirical study, concentrated on factors designated as »manager skills«, »associate skills«, »situations in which managers have found«. Also, it presents the impact of management level on the success as well as factors influencing the range of control (identifying the number of immediate subordinates to a manager).

2. MANAGEMENT (CONCEPT AND DEFINITION)

The word »management« has different meanings. There are many approaches to defining it. There are various theories about management. In determining the concept and definition of management we are faced with numerous problems.
In various dictionaries one can find the following synonyms: manage, direct, organize, decide, control, motivate, plan, rule, lead, attain objectives etc.
Also, the term »management« appears in three different meanings in technical literature, such as: directing, managing and organizing.
Since the word management comes from the verb »manage«, originating from the Latin word »manus« (meaning: hand), it could be concluded that the concept of managing corresponds to this term the most. However, in defining the meaning of this term, it is not enough to consider semantics or etymology only; it has to be seen from the functional, sociological and other aspects as well.
According to Adizes, management can be defined by means of the four roles, each of which is necessary on its own, but all together sufficing for good and quality management. The first role is the production of result (P). Job of a producer is to satisfy a need of a client. The second role is administration (A). It means that a company must systemize organizational processes, do the right thing, in right order, with the right intensity. The third role is a need for vision, someone who will determine a direction for the future. That is the entrepreneur (E), who is the product of creativity and risk assumption. Finally, the fourth role is integration. Management must integrate (I), that is create climate and system of values to motivate individuals to work together. When decision-making is concerned, it is hard to make a right decision if there are no answers to all of the questions: (P) what, (A) how, (E) by when – why not, (I) who.
Peter Drucker defines the management as follows: »No doubt the main task of the management has remained the same: making people able to act together in the achievement of set targets, common values, appropriate structure, training and development, required to perform their job and respond to changes« [1].
Further on, Drucker states that management is based on several principles:

- Management is about people. The task is to ensure that people work together, to give them prior training and make them use their potential in an effective way;
- Management is about integrating people, which means that it is an integral part of culture;
- A company must have clear, simple and common objectives. The mission of a company must be clear. Management must analyze, set and interpret specific goals, values and general objectives well;
- Management must make possible a company for its members to grow and develop with changing needs and possibilities;

- Every company consists of people with different qualifications, level of knowledge and who perform diverse duties. All members must be familiar with the goals;
- Every organization needs diverse measures, indicator to assess their performance, result;
- The most important thing for a company, for any organization, is that »the results exist only outside«. A satisfied customer is the result [1].

3. FUNCTIONS AND LEVELS OF MANAGEMENT

Tasks and processes covered by the management, and what the managers do – are important issues in the analysis of management. According to Peter Drucker, these questions can be answered only through the analysis of management functions [2].

Management may be seen in various ways, starting from being »a process or series of continued and connected activities« to »reaching organizational goals in an efficient and effective way through planning, organization, leading and control of organizational resources« [3].

Theory knows of numerous classifications of management functions. Many theoreticians and researchers of management, starting from Fayol, differ from each other in number and name of management functions.

It is particularly important to underline the management classification defined by Peter Drucker, who believed that the manager's job includes: setting objectives (planning), organizing, motivating, communication (leading), performance measurement and evaluation (control), staff recruitment and development. Therefore, these are the usual management functions.

Having in mind many classifications of management functions, it could be concluded that the following classification is predominant: planning, organization, human resource management, leadership and control.

On the basis of these management functions, jobs done by a manager may be deduced. Every manager must plan, organize, manage people, direct and control. Also, management includes mediation jobs: decision-making, influencing, communication, coordination. All managers perform these tasks, but differ from each other by how much they are devote to each of these functions, i.e. how much time they take for any of them.

However, in modern management there are teams of managers as well as experts for individual issues which are necessary to achieve success. Normally, companies have experts in planning, organization, human resource management and control.

All managers perform managerial functions, but the time taken for each function may be different. According to some studies, top managers spend more time planning and organizing. Leading takes a lot of time to lower-level management as well. Differences in time managers at various levels devote to control are small [4].

4. ANALYSIS OF RESULTS OF STUDY

The objective of the study is to learn to what extent Montenegrin managers apply the principles of successful management in attaining their goals.

The sample comprises 106 managers from 95 Montenegrin companies The base used in the study consists of managers, their opinions and standpoints on issues given in the survey, including independent variables, such as level of managers, sex, age structure etc.

A special questionnaire has been used for the collection of data. The data have been analyzed by quantitative analysis, i.e. descriptive analysis of data such as frequency of answers from the questionnaire. The method of crossing individual questions with independent variables has also been used, in order to get more realistic answers, i.e. to get a more realistic picture of attitude of analyzed managers to certain principles and characteristics.

4.1. Factors relevant to the success of managers

There are many factors that influence the success of managers and they could be, globally, classified in three groups: one – skills, knowledge, abilities and other qualities of managers themselves, two – knowledge, skills abilities and other qualities of employees working with managers, three – different situations in which managers manage. For the purposes of this study, we have designated them simply as » manager abilities«, »abilities of associates« and »situations in which managers have found«. The results of the study are given in Table 1 below.

As seen in the Table, 1 managers attribute the highest relevance to success to »personal abilities« (67.9%) and the smallest relevance to »situations in which managers have found« (28.3%). This confirms the attitude that successful managers »relate« their success to their own abilities, which is normal, because a sucessful manager, regardless of where he works, will always be successful primarily because he is an able manager.

Table 1: Factors relevant to the success of managers

Factors	Degree of influence %				
	slight	medium	dominant	no answer	total
Personal abilities	1,9	24,5	67,9	5,7	100
Abilities of associates	7,5	50,9	34,0	7,5	100
Situations in which managers have found	12,3	50,9	28,3	8,5	100

4.2. Factors relevant to the success of managers and management levels

Are there differences in the perception of factors relevant to the success of managers at different levels? Answers are presented in Table 2.

Table 2: Factors relevant to the success of managers and management levels

Factors	Degree of influence %								
	Top-level management			Middle-level management			First-level management		
	slight	medium	dominant	slight	medium	dominant	slight	medium	dominant
Personal abilities	0	25,5	68,1	2,9	29,4	58,8	4,0	16,0	80,0
Abilities of associates	4,3	48,9	40,4	5,9	50,0	32,4	16,0	56,0	24,0
Situations	12,0	46,8	36,2	11,8	41,2	29,4	12,0	72,0	12,0
Note –difference in % up to 100 is a % without answer									

When management levels are concerned, evidently there is no difference; all levels gave equal weight to factors relevant to success, and in the same order: personal abilities, abilities of associates and situations in which managers have found.

4.3. Factors relevant to the success of managers and sex structure

Answers of analyzed managers about facts relevant to the success of managers in relation to sex structure are presented in Table 3.

Table 3: Factors relevant to the success of managers and sex structure

Factors	Sex of managers %					
	Male			Female		
	slight	medium	dominant	slight	medium	dominant
Personal abilities	-	27,3	70,1	7,1	17,9	64,3
Abilities of associates	6,5	49,4	39,0	10,7	57,1	21,4
Situations	13,0	53,2	27,3	10,7	46,4	32,1
Note –difference in % up to 100 is a % without answer						

Both male and female managers gave the biggest advantage to »personal abilities«, However, unlike male managers, female managers related success more to »situations in which managers have found« (32.1%) in comparison to »abilities of their associates« (21.4%). Male managers gave preference to »abilities of associates« (39.0%) in relation to situations (27.3%).
It can be concluded that both male and female managers attach highest importance to persona qualities in being successful. It is interesting that female managers give less importance to skills of associates than male managers.

4.4. Factors relevant to the success of managers and age structure

When factors of success and age structure as an independent variable are concerned, there are no differences.

Table 4: Factors relevant to the success of managers and age structure

Factors	Age structure %														
	up to 30			31-40			41-50			51-60			over 61		
	S	M	D	S	M	D	S	M	D	S	M	D	S	M	D
Personal abilities	0	21,4	71,4	2,6	21,1	73,7	3,6	32,1	53,6	0	33,3	66,7	0	0	100
Abilities of associates	0	57,1	35,7	7,9	52,6	34,2	7,1	42,9	39,3	13,3	53,3	26,7	0	0	100
Situations	14,3	50,0	28,6	10,5	50,0	34,2	10,7	50,0	28.6	20,0	53,3	20,0	0	50,0	100
Note –difference in % up to 100 is a % without answer															

Managers of different age give the same advantage to »personal abilities«, »abilities of associates« and »situations« (Table 4.).

4.5. Number of management levels and efficiency

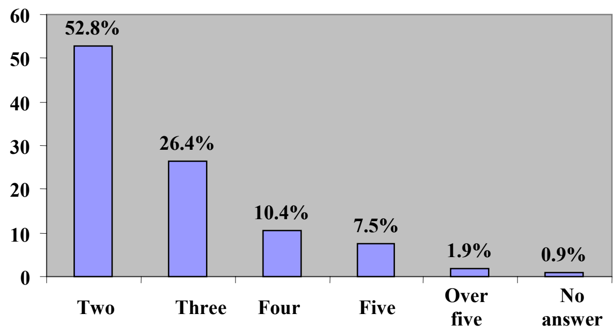
Number of management levels is also important to the management analysis. Management levels help in determining vertical differentiation and depth of organization, type and number of managers, and other relevant aspects of organization and management, which have an impact on the decision-making efficiency.

4.5.1. Number of management levels

Number of management levels in the analyzed sample is presented in Table 5.

Table 5: Number of management levels

Number of man.levels	%
Two	52,8
Three	26,4
Four	10,4
Five	7,5
Over five	1,9
No answer	0,9
Total	100



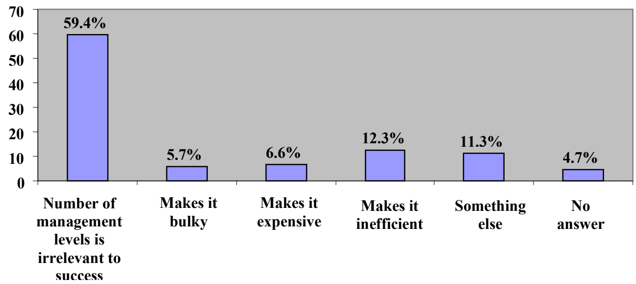
The most frequently found number of management level in the analyzed sample is two (52.86%), then three (26.4%), and least frequently over five (1.9%). Management levels depend on company size. A big company involves more management levels, while small and particularly micro companies usually have two levels.
This structure of number of management levels is positive from the aspect of decision-making efficiency. The lesser the number of levels, the bigger the chances for more efficient and effective implementation of decisions.

4.5.2. Number of management levels and success

Does the number of management level have an impact on the company success, or whether management levels are properly established and how much this important segment has been taken into account – answers to these questions are presented in Table 6.
The biggest number of analyzed managers answered that umber of management levels is of no relevance to success (59.4%), which leads to the conclusion that they insufficiently understand the importance of number of management levels in relation to success. The lesser the number of management levels, the bigger the chances for quicker flow of information, quicker decision-making, easier change management, more successful performance.

Table 6. Relevance of management levels to success

	%
No of management levels is irrelevant to success	59,4
Makes it bulky	5,7
Makes it expensive	6,6
Makes it inefficient	12,3
Something else	11,3
No answer	4,7
Total	100



4.5.3. Factors relevant to control span (determining the number of immediately subordinated associates to one manager)

Since the biggest number of analyzed managers answered that they have 3 to 5 associates (39.6%), it is interesting to see which factors have impact on the span of control (Table 7).

Table 7: Factors relevant to control span

Factors	Ranking %				
	fist	second	third	fourth	fifth
Knowledge and skills of subordinates	34,0	17,0	10,4	10,4	13,2
Clear delegation to associates	15,1	27,4	17,0	13,2	6,6
Manner and possibility of communication with associates	7,5	16,0	21,7	20,8	13,2
Number of daily controls between managers and users	3,8	13,2	16,0	23,6	22,6
Management level	17,0	7,5	17,9	14,2	27,4
No answer	22,6	18,9	17,0	17,9	17,0

The biggest number of managers (34.0%) chose answers saying that knowledge and skills of subordinates influences their number the most, then the management level (17.0%) and clear delegation to associates (15,1%), while the number of daily controls between managers and users (associates) have the smallest influence (3.8%). A very high percentage of analyzed managers have not answered to this question, which can be explained by the lack of information or lack of knowledge on the basis of which they would be able to choose among the mentioned factors.

The span of control is influenced by many factors: job complexity, management levels, knowledge and skills of associates, type and intensity of communication with associates, ability to delegate tasks etc. The analyzed managers gave by far the greatest importance to knowledge and skills of subordinates, in comparison to other offered factors that are relevant to control span. Since there is no even intensity in answers, it can be concluded that Montenegrin managers do not have enough knowledge or information to assess all the factors. A very high percentage of managers who have not answered this question speaks in favor of such conclusion.

4.5.3.1. Factors relevant to control span and management levels

Table 8 shows how managers at different levels see factors that have impact on the number of immediate subordinates.

The table shows the structure of given answers. Managers at all levels give the highest importance (ranking 1) to »the knowledge and skills of subordinates«, or the control span of 34.0% (top-level), 41.2% (middle-level), 24.0% (first-level), and the lowest to »the number of daily controls between managers and users« (2.1% top-level, 2.9% middle-level, 8.0% first-level). It is interesting that top-level managers attach highest importance to »the manner and possibility of communication with associates« (12.8%) compared to middle and first-level managers (2.9% and 4.0%). Also, middle and first-level managers give more importance to »clear delegation to associates« (20.9% and 20.0%) than top-level ones (8.5%). Therefore, managers at all levels do not have enough information and knowledge to realistically assess factors relevant to control span.

Table 8: Factors relevant to number of subordinates and management levels (Ranking 1)

Factors	Management levels %		
	Top-level	Middle-level	First-level
Knowledge and skills of subordinates	34,0	41,2	24,0
Clear delegation to associates	8,5	20,6	20,0
Manner and possibility of communication with associates	12,8	2,9	4,0
Number of daily controls between managers and users	2,1	2,9	8,0
Management level	19,1	11,8	20,0
No answer	23,4	20,6	17,0
Total	100	100	100

5. CONCLUSIONS

Starting from the fact that the management function is crucially important for success, regardless of the type of organization (company, bank, school, state administration, non-government organization etc) as well as from the results of the study, we can state the following:

Successful managers »relate« their results to their own skills and abilities, which is normal, because a successful manager, regardless of where he works, will always be successful primarily because he is an able manager.

The structure of number of management levels is positive from the aspect of decision-making efficiency. The lesser the number of levels, the bigger the chances for more efficient and effective implementation of decisions.

The analyzed managers do not fully understand the importance of number of management levels for success and they do not have either enough knowledge or information to select among the factors relevant to the span of control.

Of course, this is just a part of problems managers in Montenegro are faced with. A more detailed study would show which those problems are and of what intensity.

Continued education and training of managers is a basis for successful operation. It is particularly important for Montenegrin managers, even more so as they do not have enough experience in conducting operations in a market-based manner. It is very important for them to focus on acquiring conceptual, communication and technical knowledge.

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POSSIBILITIES AND POTENTIAL EFFECTS OF SYSTEM MANAGMENT ENCLOSURE THROUGH QUALITY, ACCORDING TO ISO 9001, INTO LEATHER INDUSTRY ENTERPRISE

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***Summary**: In leathering industry, there is a need for multiple different system managements, as for a need for one integrated system (ISO 9001 – quality management system, ISO 14001 – ecological management system, OHSAS 18001 – protection management and employee safety system.) To become aware of necessity of ISO 14001 and OHSAS 18001 standards enclosure, it is necessary to implement a quality management system, according to **ISO 9000**, which is the basics itself anyway, for organization functioning and necessary system upgrading as well. The roll of quality is directly conditioned by the comprehension of this term. The special level would be the protection of quality, regarding a system of precautions which the industry takes to get buyers confidence in completion of product qualities and service requirements. Higher level is the subsistent standard model **ISO 9001**, which, besides quality protection, treats definite managing aspects. Goal: Induction of standard ISO 9001 into leather industry enterprise, defining the minimal assemblage of requirements, that would guarantee the equability of the products qualities, and prevent products with deviation from getting to the buyers. The standard protects the buyer by asking from the manufacturer to provide the resources and to apply the managing system to the processes of work themselves to ensure the completion of customer requirements.*

***Key words:** Quality, Quality Management System(QMS), ISO 9001, completion of customer requirements, leather industry*

1. INTRODUCTION

In the last decades, the value of leather industry went down in relation to the other industry departments. There are many reasons for that, from expanding chemical materials similar to leather, to ecological slogans of the new environmental protection societies. Of course, the need for the natural leather products does not abate, so the question is also: what is the real reason of this industry department black-out. The technology of leather refining in these factories has no essential differences in relations to the initial, but the working system and the factory leading system is adjusted to the strict competition conditions of the present. [1]
Of course, the problematics of functioning of this industry department is growing bigger in time and grasping all the systems inside the organization. Just a few of the problems are:
- lack of utilization of gear capacity
- irrational energy consumption
- employees are paid, although not always working
- lack of explicitly defined management inside the organisation
- constant endangering of the environment
- dilapidation of the instruments and orderless working environment, etc…

In this condition of an industrial department, any controlable change would lead to a massive progress. From the above, it can be concluded that it is necessary to introduce the quality system to the leather industry. Theoretically, the possibilities for quality appliance are limitless. In this situation, adaption and part both depend on organisations capabilities to make itself capable to apply the change. The fact is that every model has its own limits, and no possibilities to improve. Using the principles, methods, usage of quality tools, all the aspects of operation can be affected. Business score has its special position, which should be basic, internal motive of every

organization, to include itself in, what we most often call “quality movement”. Of that not being the end of possibilities for quality appliance, tells us the subsistence ISO 9004 standard, then the models of business magnificence and different models of controlling that lead to benefits, developed by the great international companies, to increase possibilities for business rationalizing. [6]
Standards are gone as a consequence of need to affirm the requirements that a manufacturer has to complete, so that the buyer would find him convenient for a long sighted cooperation. Such requirements were first formulated by the U.S. government, in 1950th-es, last century. Army and other great systems like police, railway, hydraulicity, are in deal with a large number of suppliers. If they are on a different level of progress, if the quality of their products differs from delivery to delivery, then the buyer himself must personally control every acquisition, which is quite expensive and has no guarantee to reveal every malfunction on every single product. On the other hand, manufacturer himself has a problem – different buyers make different demands, and each of them control their own delivery, so it is almost impossible to satisfy all the customers.
So, it would be convenient to define a minimal turnout of requirements that would guarantee the quality equivalence for the delivered products, and prevent products with malfunctions to get to the buyer. ISO 9001 Standard [5] has just the purpose – he protects the buyer by asking from the manufacturer to provide resources and to apply the managing system on the processes of work to ensure the equivalence and satisfaction of buyer conditions.

2. QUALITY PRINCIPLES UN SYSTEM MANAGEMENT

In its work, the company must keep some definite principles, and 8 of most valuable are given in the 9000:2000 standard.
Principle 1: DOWNLOAD TO USERS
Principle 2: LEADERSHIP: THE LEADING AUTHORITY PART
Principle 3: INCLUSION OF THE STAFF
Principle 4: PROCESS ACCSESS
Principle 5: SYSTEM ACCSESS TO MANAGEMENT
Principle 6: CONSTANT IMPROVAL
Principle 7: FACT-BASED DECISIONS
Principle 8: INTERACTIVELY USEFUL RELATIONSHIPS WITH SUPPLIERS
Requirements that have to be completed by the suppliers are defined and documented in a convenient way. Their capability to control deliveries of quality products and services is being questioned and rated. It is necessary to make a strategic cooperation or a partnership, providing early inclusion and participation in defining requirements for a common development and product, process and system advancement. Correlative trust, respect and buyers pleasure and permanent improvement is developed.
Principles 1, 2, 3 and 8 represent the statements of work ethics, while principles 4-7 represent operative skill, based on four steps, forever repeating:
- planning
- bringing the plan to work
- analyzing data about execution
- learning a lesion and modifying the plan

These four steps are known as PDCA, “Demings Circle”, or “The circle of constant improvement”, and it is graphically presented in figure 1 [2].

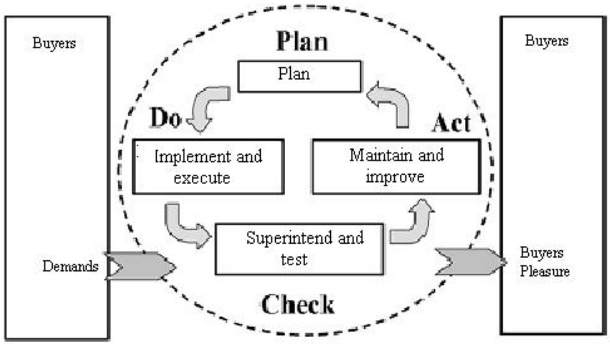

Figure 1: Deming’s circle (the circle of constant improvement)

3. THE PROCESS OF NAUGURATION OF QMS IN A FACTORY OF LEATHER WROUGHT GOODS, ACCORDING TO THE CHECKPOINTS OF ISO 9001 STANDARDS

Director General, according to the factory statute, proposed the adaption of Internal rules about quality to the steering committee. With that document, along with all the other documents that come from out of it, and with a maintained quality system, it is guaranteed that the factory has fulfilled the requirements of ISO 9001, and, by that, made it possible to systematically control the quality. All the documents of the quality system of the leather company must be in accordance with requirements and regulations defined in the document about Internal rules about quality.

1) Internal rules about quality must have, in its first chapter, basic data about the factory, a short text about companies history, number of employees, qualification structure and a description of its basic industry (modification of large leather parts, and production of wrought leather goods)
2) Second clause of the Internal rules about quality is about authorizations. At this point, next parameters are clearly defined:
    - GOAL of the Internal rules about quality is to identify minimum of the requirements of business processes. This document represents the assemblage of activities and responsibilities, that make satisfaction of requirements of ISO 9001 (referent standard) possible. The main purpose of this document is to give information about actions needed for activities and instructions necessary to control all activeness that affects quality. The document provides instructions to all the positions inside the company, and by that secures the development of their systems, procedures, safeguarding the inscriptions, and the evidence of successfully carried out questionings and internal checks, processes, staff and products. Besides that, Internal rules about quality which is due to prove the equivalence of the system, quality of the leather factory with the requirements of the referent standard.
    - APPROVAL - Internal rules about quality of the leather factory is approved by Director General, and none of its part can be modified without the permission of Director General.
    - RECONSIDERATION – the entire Internal rules about quality is constantly reviewed every second year, and the chapters are updated if necessary. These scripts are kept by the **Director of Quality Providing Sector.**
3) Statement about quality politics – represents the signed statement by which the leather company confirms that it has chosen the path towards the constant quality reformation.

Needed documents (Procedures, Instructions, Inscriptions…etc.) that are necessary to be defined in one system of leather industry, by sectors and phases of process, are shown in the next table.

	PRODUCTION SECTOR
1.	**Procedure: Controlling production**
	-Forms - Production account
	- Raw skin preparation account
	- drenching raw skin account
	- Requisition of raw skin for ‘wet’ department
	- Receptura for ‘wet’ department
	- Receptura for ‘wet’ department
	- Technological Map
	- Requsition of chemicals for ‘wet’ department
	- Work account
	- Assigning for drenching account
	- Basic work account
	- Laboratory report of processing control and research
	- Data for opening a work account
	- Work account
	- Aquisition of chemicals for the finish department
	- Laboratory report of finishing testing
	-**Production manual (operation description)** 1) Put the raw skin in the drenching barrel
	2) Dosage of water and chemical elements into the drenching barrel
	3) Pulling the drenched skin out of the barrel
	4) Skinning the young bulls
	Removing meat from young bulls’ skin

	Removing meat from calfs skin
	5) Pruning the skin after the skinning
	6) Putting the pruned skin into the leaching barrel
	7) Pulling the leached skin out of the barrel
	8) Ripping the leached skin
	II 9) Putting the leached skin into the tanning barrel
	II 10) Dosage of water and chemicals into the tanning barrel
	11) Pulling out the tanned skins out of the barrel
	12) Assorting of tanned skins (wet-blua)
	13) Draining the skins
	14) Ripping the skins
	15) Scrapping the skins
	16) Scrapping body parts
	17) Scrapping the legs
	18) Putting the scrapped skin into the barrel
	19) Dosage of water and chemicals into the painting barrel
	20) Pulling the painted skins out of the barrel
	21) Alignment of skins
	22) Vacuum department
	23) Drying department
	24) Pruning the skin
	25) Measuring the skin
	26) Wet skin alignment
	- Work Manual-sorting semi products FINISHING (operation description)
	1) Damping
	2) Softening the skins
	3) Manu softening
	4) Polishing
	5) Skin dusting
	6) Mekšanje (valkanje)koža u buretu
	7) Pruning the crusts
	8) Sputtering of paints and polishes
	9) Sputtering of paints, polishes and impregnations
	10) Ironing
	11) Extension of skins
	12) Colorist
	- Protection of workers at work manual
2.	**Procedure: Sample making**
	Forms- Sample Card
	Work account
	Receptura za mokro odeljenje
	Receptura za dovršno odeljenje
	Work account
	Laboratory report of processing control and research
	Laboratorijski izveštaj of final control and testing
3.	**Procedure: Preventive working tools maintenance**
	Forms- Date preventive review plan
	Report about finished preventive check
4.	**Procedure: Repairing working tools**
	Obrazci- Izveštaj o izvršenoj opravci
5.	**Procedure: Production Planning**
	Obrazac- Godišnji proizvodno finansijski plan
	-Monthly operative plan
	-Weekly operative plan
	Commercial sector

6.	**Procedure: Contract Reconsideration**
	Form- Buyer question
	-Offer
	-Closure
	-Production Account
7.	**Procedure: Solving buyer reclamations**
	Forms Book of evidence of buyers reclamations
	-Report about solving the buyer reclamations
	-Book entry approval
	-Buyers reclamation cause report
8.	**Procedure: Storage and delivery of finished products**
	Forms- Finished products release account
	-Dispatch note
	-invoice
	-parcel office
9.	**Procedure: Acquisition of materials from domestic market**
	Form- Quality contract annex
	-Inquisition account
	-Demand offer
	-Offer –depends on supplier
	-Order form
	-Contract-free form
	-Acquisition realization book
	-Supplier choice and contracting manual
10.	**Procedure: Resolving reclamations with suppliers**
11.	**Procedure: Reception and storage of raw skin**
	Form- requisition
	Forms - Drenching account
	-Reception protocol
	-ID card
	-Status Tags
	-Storage card
	-Entrance book
	-Raw skin storage manual
	-Taking over raw skin from supplier manual
	-Sorting and distribution of raw skin manual
12.	**Procedure: Supplier eligibility rating**
	Form- Info query for rating supplier quality
	-List of suppliers
	-Rating and ranking suppliers manual
13.	**Procedure: Foreign market material acquisition**
14.	**Procedure: Reception and storage of Chemicals**
	-Reception protocol
	-ID Card
	-Status tags
	-Storage card
	-Entrance Book
	-Distributing chemicals from warehouse manual
15.	**Procedure: Verification of suppliers products**
	Form- Report about verification
16.	**Procedure: Buyer-delivered products control**
	TI SECTOR
17.	**Procedure: Staff reception**
	Form -Staff reception request
	-Election decision
	-Work contract
	-Work disposition resolution

18.	**Procedure: Staff tutorial**
	Form -Tutorial program
	-Tutorial realization plan
	-Staff education veryfication resolution
	-Education check protocol
	-Completed tutorial evidence card
	-Quality system education manual
	-Security service work manual
19.	- Jobs and work tasks organisation and systematization rule book
	QUALITY SECTOR
20.	QUALITY RULE BOOK
	- Organization scheme
	- List of documents
21.	**Procedure: Quality System Document Control**
	Form -Making a new-editing an old document request
	-Document distribution list
	-Document revision evidence
	-List of documents
	-Manual-manufacturing manual
	-Procedure manufacturing manual
	-Diagram manufacturing manual
	-Marking document manual
	-Quality inscription control manual
22.	**Procedure: Controling and Testing Processes**
	Form - Laboratory logbook of process control and testing
	Chrome determination method
	Ph-value and solvate density measuring method
	Tanned skin testing method-boiling resistance
	Calculating calculate mass method
	-Process control and testing plan
	pH value determination with indicators method
23.	**Procedure: Reception control and testing**
	Form - Reception conrol and testin laboratory report
	-Reception control results card
	-Reception control and raw skin testing report
	Raw skin salt determination method
	Raw skin moist determination method
	Concentrated sulphur-acid determination method
	Concentrated methan acid determinaion method
	Metoda za odred.baziciteta baznog hrom sulfata
	-Reception controling and testing plan
	-Raw skin sampling manual
	-Chrome-sulphur sampling manual
	-Sulphur and methan acid sampling manual
24.	**Procedure: Final control and testing**
	Forms Analysis card
	Final control and testing laboratory logbook
	-Leather sampling manual
	-Raw skin classification manual
	-Final control and testing plan
	Rubbing paint resistance determination method
	Method of testing pressure spray ring persons met. Tensometer
	Method of testing finished leather alternately rolling in – flexometer
	Moist in leather testing method
	Cinder in leather testing method

	Leather testing method-chrome composition determination
	Leather testing method-unbound fats determination
	Leather thickness determination method
25.	**Procedure: Quality system internal check**
	Form-Internal checks disposition
	-Internal check plan
	-System quality internal check report
	-Internal check query
	-System quality internal checkers trainng manual
	-Internal check generic query
26.	**Procedure: Unequal products managing**
	Form-Unequal products waybill
	-Digression approval request
27.	**Procedure: Identification**
	Form: - Wetting account
	- Recipes for wet Department
	- Recipes for finalizing Department
	- 'Wet' department repromaterial requisition
	- Finalizing Repromaterial requisition
	- Basic work account
	- Work account
28.	**Procedure: Preventive and editable precautions**
	- Preventive and editable precautions protocil report
29.	**Procedure: Acquisition and reception of measuring equipment**
30.	**Procedure: Measuring equipment checkout**
	Form: - Measuring equipment specifications
	-Measurement card
	- Measuring equipment periodical review plan
	-Measure equivalence marking tags
	-Measuring equipment checkout
31.	**Procedure: Quality Planning**
	-Quality plans manufacture manual
	-Business plans manufacture manual
32.	**Procedure: Nauguration and usage of statistic methods**
	Form – Statistical method of nauguration and usage plan
33.	**Procedure: Conditional reception**
	Form: - Conditional material reception approval request
	-Conditional reception-Status tag
34.	**Procedure: System quality testing**
	Form- Quality system functioning report

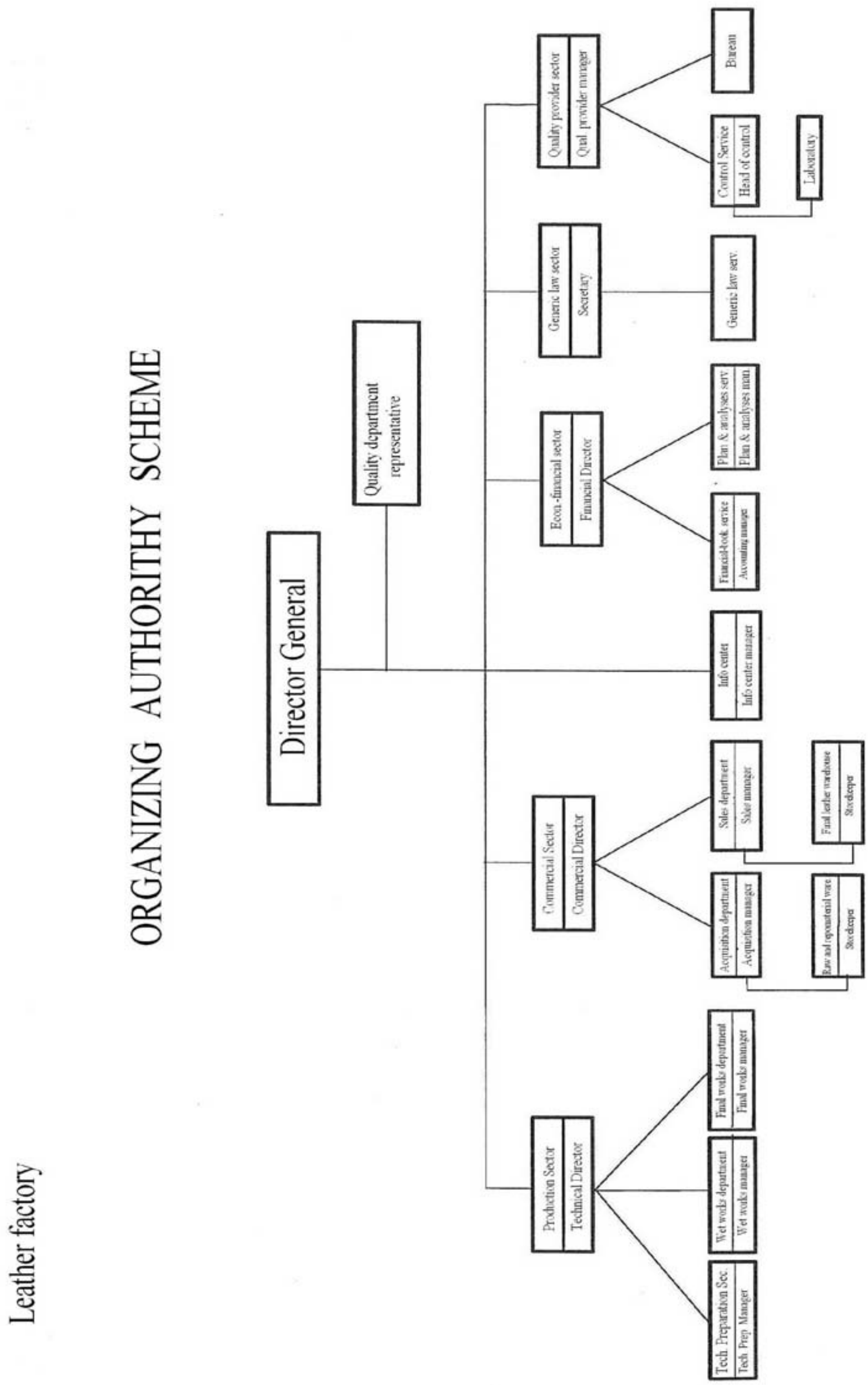

Figure 2: Authority scheme in finished leather factory

4. RESISTANCES THAT COME ALONG WHEN INTRODUCING ISO 9001

a) Expenses of introduction and maintenance
b) Time of introduction
c) Organisational resistances, and the employee resistances to innovations
d) Maintenance of the quality system
   - Basic shape of quality system maintenance is conducting it persistently.
e) More documentation

5. ADVANTAGES OF INTRODUCING QMS OVER ISO 9001

By the entrance to the implementation of QMS, after a short period of time, we came to significant changes in the organisation:

- A system of planning has been established, based on goals, defined elements, authorities, and deadlines, that will provide better coordination of activities when making business plans.
- Defined standard parameters for business analysis every year.
- Established data collecting system about business, that grants facts-based decisions, and makes data comparable, when it comes to trend considering
- Activity coordination way when making a contract with the customer has been edited, and when it is about hiring a contractor, the information flow is faster, and collecting returnable information is faster, on our clients satisfaction.
- Updated system of acquisition of basic resources and expendable materials
- System of working tools maintenance edited, which provides better sight of state and potential of equipment, and decreasing of maintenance costs is expected.
- Tutorial system for the employees has been established, which should provide forming of appropriate programs of training and improvement for all the employees in the factory, according to their jurisdictions. It will also, through their realisation, level up the competence, efficiency and effectiveness of the company.

Just like it can be noticed, the advantages of introducing the QMS are mostly based on orderliness of one system, clear and documented duties of all the employees, and a constant ambition for progress. In every sector, lots of advantages can be brought up, and the basics of positive functioning and the strength of all other advantages are:

a) Enlargement of consciousness about quality, and the satisfaction of employees.
b) Better understanding of buyer needs.
c) Improving efficiency and effectiveness
d) Correspondence in the whole factory
e) Work improvement in different working environments

– Emanation of the sign ISO 9001, after the certification, is the right of the business organisation and points at internationally affirmed organisation and the edition of a business system.

6. INNOVATIONS IN STANDARD ISO 9001

ISO is on 14^{th} February 2008. published ISO 9001:2008, the newest edition of international standard which is being used by 175 countries as a quality management system(QMS).
A new version of standard ISO 9001 2008, [4] in draft phase, attracts great attention and is a subject of analyses and comparison with the version ISO 9001:2000 from different aspects and by different intrigued sides. [5] The subject and intension of this work I to try to close in the way of thinking about what the new version of standard brings.
As the most significant changes in relation to the valid version of standard, in the draft version, some can be highlighted:

- Potentiation of implementation and compliance with legal requirements
- Insisted on the reliability of equipment for monitoring and measuring the processes
- The representative of the leadership does not have to be a member of top management
- Processes must be determined, not only identified
- Requires the evaluation of the effectiveness of training
- Information technology in the security infrastructure is applied
- Focusing on the conditions of working environment, and not to the work environment
- Required more detailed planning of product realization
- Required to corrective and preventive measures are aimed at the cause of conflict

6. CONCLUSION

Introduced system of quality ISO 9001 is an important prerequisite for successful business, acquiring competitive advantages in the market and improve the quality of products. On the basis of the ongoing improvement, building the reputation and renown of customers.
The most important goals of modern business are achieving business excellence of the company's world-class products. Thus set goals in terms of global market, creating the preconditions for long-term growth and development based on the satisfaction of all segments of society - consumers, partners, employees, owners, public administration, public and so on.
Alignment with international standards ISO group, and applying new system to factory of finished leather are entering the phase of constant improvement with the use of different tools and continual adaptation to changes within the organization. The result is primarily the promotion of existing and introduction of new technology. These changes in the organization focus its operations put demands of consumers, customers and business partners with the constant monitoring of regulations and changes in the market. The entire organization is fully engaged in accordance with business policies that are implemented in the organization, and is based in the full responsibility and care about employees, customers and clients. From relations of producers and consumers, which is realized in the market, shows that consumer wants a quality product with low price in the short term, while the manufacturer to set the goal of greater earnings, which leads to high prices, low cost and low quality. However, customers have become all usecure about their choice, competition is more and more, so that it is necessary to offer the buyer more than the competition and fully satisfy its needs and wishes. The only way to gain and keep the organization is a quality consumer product or service.
The current time is quality time. Period that is before us is also the period of quality. Business process management system and defined long-term development plan is necessary to be concentrated on the quality, if they are to survive in the global flow of business. World market requires more and more products of higher quality. Developed countries have been half a century ago based on the development of quality products, services, work and organization, which are today still. Today, such a trend exists in underdeveloped countries. Quality is present everywhere.
The only way to achieve total quality is the establishment of quality management in the organization. Organization that is flexible, which can be quickly adapted to changes in the environment and learns quickly. Innovated organization is achieved by the implementation of QMS and its basic principles. The key to success is in the establishement of organizational culture in which every employee feels, not duty, but the need for constant innovation of our own work. Employee with such an approach will provide himself a job, a company that you work, competitive advantage and survival in the market.

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NONVERBAL COMMUNICATION IN A BUSINESS SETTING

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***Summary**: In modern business settings nonverbal communication has been increasingly treated as an important issue. In order to understand its characteristics and particularities, one should become familiar with its complex nature and real power it might have in the present business world. This work presents the basic knowledge of nonverbal communication in general, its application in a modern business setting and cultural differences that strongly influence nonverbal behaviour and communication. It is all illustrated by some common examples from the real business settings which might be useful to the business people and researchers of this area. Finally, this work emphasizes the need of serious research in the field of nonverbal communication in the future.*

***Keywords:** nonverbal communication, business settings, application*

1. INTRODUCTION

Nonverbal communication has been recognized as an inevitable part of every day communication. Its importance goes far beyond common communication, especially in the area of business relationships, negotiations and every "face to face"business conversation. Therefore, nonverbal communication demands a particular treatment concerning business settings and business people should be fully aware of the nonverbal communication presence.

This work would emphasize the ways of nonverbal communication in business surroundings and how to recognize its true nature predominantly hidden behind the verbal communication. Namely, this is extremely important in the context of a business communication due to the "honest" features of the nonverbal communication. The true and valid opinions of every man are actually visible in his or her nonverbal communication. This fact is in connection with some of the main goals of this work and it should be proved in further writing. Peter F. Drucker once said: *"The most important thing in communication is hearing what isn't said"* [1]. This statement reflects one of the meanings of nonverbal communication emphasizing its power over common, verbal communication.

Furthermore, one should become familiar with the types and aspects of nonverbal communication in order to recognize it while communicating. This work will present the meanings of eye contact, gestures, silence in conversation, touching. But, apart from these common representatives of nonverbal communication, we should be aware that even arrangement of furniture or seats for people are the ways of nonverbal communication.

Nevertheless, in order to understand completely nonverbal communication, one should consider some cultural aspects of each nationality. Thus, each nationality has its own characteristics, behaviour, customs. Nonverbal communication could be significantly different among nationalities. Therefore, the messages we get from one Brasilian person would not be the same as one of Japanese. Cultural misunderstandings might be fairly serious because *''every culture places different emphasis on family, work, religion and love"* [2]. It is very important for business people from all around the world to be aware of these cultural particularities as well as cultural generalizations. It is the reason why this aspect of nonverbal communication will be included in this work.

Becoming familiar with all the aspects of nonverbal communication, mentioned above, could be very important for managers and business people whose everyday job is to communicate with known or unknown people, business partners, employees, public services etc. ''Reading" of nonverbal signs may be sometimes the crucial advantage in order to achieve the best results in someone's business area. And, to be advantageous in front of others is the ultimate goal in today's business world.

2. THE "NONVERBAL" WORD

Almost 70 percent of all communication is nonverbal. Still, it is not an easy task to define what nonverbal communication actually is. Perhaps, it is much easier to define what it is not rather than what it is. According to Dr. Paul R. Timm, in *Managerial Communication: A Finger on the Pulse*, most researchers agree that nonverbal communication includes everything except our use of words and numbers in written and oral communication. It could be said that nonverbal communication, or body language, includes the following: gestures, motions, facial expression (including eye contact), use of personal space. It also extends to makeup, clothing, jewelry and personal possessions. Some of the simple examples of nonverbal communication are the following situations:

1. A manager looks at her computer screen when an employee is talking to her, obviously sending a message of disinterest or lack of time.

2. An aggressive sales rep takes his seat at a conference table and spreads his papers on either side of him, intruding on the personal space of those seated beside him.

3. A new employee wears flashy, expensive jewelry, perhaps hoping to impress her new colleagues [4].

Those were common situations of strong nonverbal messages in a business setting. They usually could be more powerful than any spoken words. What is more, words are actually the smallest parts of a message, only 7 to 10 percent. Nonverbal factors, including some voice, make up 35 to 38 percent of a spoken message. The rest comes from body language. This fact definitely proves the dominance of nonverbal communication over the verbal one. The thing is that we constantly send some nonverbal messages to other people even though we are not usually aware of that fact. The neglect of it, intentionally or not, may endanger our, carefully planned, conversations.

There are so-called five C's of nonverbal communication: context, clusters, congruence, consistency and culture. The meaning of nonverbal communication strongly depends on these elements.

The meaning of nonverbal communication changes as the *context changes*. When people are interacting, their relationship determines much of the context. The same man talking with a client, his boss, or a subordinate may display very different body language with each.

Gesture clusters are especially important and they include a group of movements, postures and actions that reinforce a common point. A single gesture can have several meanings or mean nothing at all (sometimes a cigar is just a cigar), but when you couple that single gesture with other nonverbal signals, the meaning becomes clearer.

Congruence is also a feature of nonverbal communication. The total impact of a message is based on 7 percent words used, 38 percent tone of voice, and 55 percent facial expressions, hand gestures, body position, and other forms of nonverbal communication. That is when gestures do not contradict words we have clear congruence.

Consistency refers to the knowledge of person's normal behaviour, gestures under the common conditions. Only then, one can understand his or her nonverbal messages in different circumstances.

Cultural heritage has the fundamental influence on our nonverbal communication. Besides that, many subcultures and local cultures determine our body language. In further writing, this culture issue will be explained in more details.

It is important to say that nonverbal communication starts from the moment we are in someone's presence. The way we enter the room, the way we make eye contact, the way we shake hands or nod in greetings, the way we sit and every other action sends a clear signal to someone what kind of person we are. Realizing that, we should be aware and sensitive to these signals. Also, the reaction of audience to our signals may be passive and active or accepting and rejecting. The combinations of active reaction are receptive and confrontational, and those of passive are contemplative and avoiding [3].

For instance, someone who leans toward you and nods energetically with a pleasant facial expression, perhaps even a smile, sends a signal that he or she agrees with what you're saying and will probably approve your request or proposal. A tilted head and a body position that leans away from you, with more restrained body language, may be accepting, but passive. Like acceptance, rejection has its own nonverbal communication - either active or passive.

In passive rejection, the body language becomes evasive and tries to create some distance. The eyes wander; the head turns away; the hands fidget.

Active rejection is a little easier to interpret. It may take the form of an intense stare. Body language may look as though the person is gearing up for an attack.

Nevertheless, it is necessary to understand that, like in every communication, there is a possibility for ambiguity in nonverbal communication. Not all the signs are equally important for discovery of true feelings, moods and attitudes. Therefore, there is a scale of probability for the treatment of nonverbal signs: at the top of the scale there are the least controllable signs (paleness and redness of face, intensive sweating, rapid breathing etc.) and at the bottom are easily controllable signs - face expressions (smile, mouth etc.). In the middle of the scale are

head and body posture as well as signs of legs and hands. In this context, it is good to know that we can control most of our personal nonverbal messages, but some unconscious, we cannot. In order to improve his or her business communication one must practice the meanings of nonverbal communication.
In that sense, here are some common body language signals and their meanings:

Defensive/Confrontational
Arms crossed on chest
Crossing legs
Fist-like gestures
Pointing index finger

Reflective
Head tilted
Stroking chin
Peering over glasses
Taking glasses off and cleaning

Suspicious
Arms crossed
Sideways glance
Touching or rubbing nose
Squinting slightly

Open and Cooperative
Upper body in sprinter's position
Open hands
Sitting on edge of chair
Tilted head
Hands behind back
Steeped hands

Insecure and Nervous
Chewing pen or pencil
Biting fingernails
Hands in pockets
Clearing throat repeatedly
Pinching or picking skin or clothing
Fidgeting in chair
Hand covering mouth while speaking
Poor eye contact
Perspiring
Tugging at ear
Playing with hair
Swaying

Frustrated
Short breaths
Tightly clenched hands
Pointing index finger
Rubbing hand through hair
Rubbing back of neck

It should be taken very seriously that any kind of exaggeration in nonverbal communication may "*hamper the attention and is sometimes even ridiculous*" [4]. It could cause irritation, laughing and little attention to the content. Only natural use of these skills could give the best results and have the positive influence on the effect of the presentation. Therefore, becoming familiar with the signs of nonverbal communication includes the awareness of its limitations as well.

3. NONVERBAL BUSINESS COMMUNICATION

A great number of popular books proclaim the importance of nonverbal communication in businesses and organizations. And nearly every management textbook mentions the important role of nonverbal communication in business settings. Still, very few of them directly examine nonverbal communication processes in these settings.
Communication in a business setting is constant and very complex issue. Some previous estimates, done by Mintzberg (1973), say that managers spend 80 percent of their workday engaged in communication. Naturally, a great deal of that communication is purely nonverbal and many companies are interested in search of that area. That interest grows together with the knowledge that human resources are the most important elements in every company. Thus, organizations today regularly talk about their "human" or "social capital" [5]. Their workers are engaged in teamwork and constant interactions in order to achieve common goals. When we include the cultural and ethnic varieties among employees, the significance of nonverbal communication in business is huge. The quality and quantity of a job done at a work place directly depends on communication, verbal and nonverbal.
In that sense, it is very useful to present some of the situations where nonverbal communication plays important role relating to business settings.
Nonverbal communication in the evaluation of personnel is very important and plays an important part in the hiring interview from both the applicant's and the interviewer's perspectives. Applicant engages in careful impression management, thoughtfully monitoring verbal responses to emphasize job-related strengths and hide potential weaknesses (Fletcher, 1989; Gilmore, Stevens, Harrell-Cook, & Ferris, 1999). Research shows that

applicants display more expressive nonverbal signs as eye contact, smiling, outward gestures and direct body orientation. The nonverbal communication may be given greater weight than the applicant's words in forming an overall impression of the applicant. Still, the interviewer's nonverbal behaviour can also play an important part in influencing the applicant's behavior during the interview. In an interesting study (Liden, Martin, & Parsons, 1993), interviewers behaved in either a “cold” or “warm” manner (little versus more eye contact and smiling and a more or less direct and forward orientation toward the applicant - all signs that signal immediacy). The result was the following: warmer manner caused better performance of the applicant and colder manner caused the opposite. Consequently, nonverbal behaviour of both applicant and interviewer can play a significant role in the success of interviews. Interviewers, however, could also vary in their ability to decode nonverbal signs and it is proved that they can improve their skills via training and experience. “The Pygmalion effect” involves the subtle, often nonverbal, communication of expectations to another individual that influences his or her behaviour. In the case of work performance, “the Pygmalion effect” would most often occur when the expectations of a supervisor are conveyed to the supervising worker, affecting his or her work performance. This effect is stronger in military rather than business organizations, and affects in a greater amount males than females. Also, it has stronger influence on low-performing workers rather than high-performing ones. In the world of management, there are many different training programs for supervisors in order to communicate positive expectations to their workers. A great deal of that is nonverbal communication. Nevertheless, this task is not easy at all because nonverbal communication requires a complex skill – the one which leaders develop over time.

Nonverbal communication in management and leadership is another issue of great importance for managers and leaders in a business setting. They are expected to provide “*emotional support and motivating encouragement to the followers”* [5]. The essential thing for the leader’s success is to decode and understand his employee’s feelings and attitudes predominantly through nonverbal communication and behaviour. Leaders should develop self-monitoring of their own nonverbal behaviour as well. For instance, it has been found that a more relaxed facial expression and direct eye contact were connected with greater perception of power and credibility in males (Aguinis, Simonson, & Pierce, 1998), but not for females (Aguinis & Henle, 2000). The role of nonverbal communication in leadership is the most visible to charismatic leaders whose emotional nonverbal and verbal communication inspires many people and forces them to act. Namely, the leaders who have more developed nonverbal behaviour (especially in emotional sense) are considered more charismatic by their followers. Also, such leaders are fully aware of nonverbal behaviour of their followers and they are very successful in decoding processes of nonverbal messages. They are able to “read” their supporters’ needs and to produce the atmosphere of collective emotion. The charismatic leader also tends to model a proper behaviour for his followers. Thus, he creates leaders of his followers, people who are creative problem solvers. Leadership researchers often refer to the importance of a leader's “empathy” as a critical factor of the leader's ability to be responsive to followers. That “empathy” often refers to nonverbal communication skills. Leaders use their nonverbal signs in combination with emotions in order to affect followers through so-called “contagion process” (Hatfield, Cacioppo, & Rapson, 1994). Still, people vary in their susceptibility to emotional “contagion process” (Doherty, 1997). In addition, some charismatic leaders may manipulate and exploit their supporters creating unhealthy emotional dependency relationship with them.

Nonverbal communication and managing emotions in the workplace deal with control of negative and undesirable emotions and encouragement of the opposite emotions. It especially refers to workers’ anger and frustrations and how to turn them into positive emotions at the work place. This is still current process and there is a lot of work in this area to be done in the future.

Nonverbal communication in sales and customer service plays an important part in the quality of customer service. Except “service with a smile”, there is some evidence that “positive” and more “immediate” nonverbal behaviours by sales and service workers (e.g., smiling, eye contact) are connected with a more positive experience by customers, even to the extent of leading to larger tips for smiling as opposed to unsmiling staff. Positive nonverbal style leads to better quality customer service, and subsequently greater profits. Therefore, there is a strong belief in the business world that it does indeed matter. For instance, in the area of personal sales there are many training programs in order to make service workers “friendlier” in the sense of nonverbal communication. In addition, there has been a huge interest in nonverbal communication in the field of marketing and advertising (use of music, sound effects, voice tone etc.).

Nonverbal communication and the virtual work organization are in a strange relationship today. Electronic communication, including the virtual work team members who never meet face-to-face, represents a great problem in terms of huge loss in nonverbal communication. Visual and auditory nonverbal cues are missing in e-mail and text messaging. Live video-conferencing is the only exception but, still not the real replacement for face-to-face contact. In 2003 the study of Hebert and Vorauer proved that e-mail communication and interaction was less successful than face-to-face contact predominantly because of the lack of nonverbal communication. Furthermore, without visual and vocal feedback cues, e-mail users may engage in harsh and insensitive criticism of others (termed “flaming”), which could seriously damage personal and work relationships [5]. This has led to a concern about how to develop and maintain high quality interpersonal relationships among members of virtual work teams. They actually noticed the problem and introduced some creative strategies, for instance, the use of "emoticons" – the various smiley faced characters in order to express emotions in e-mail communication. It is also suggested that should be avoided the tone of a written message. Nevertheless, it is important to say that the absence of nonverbal communication may be useful for some social interaction anxiety and can motivate people to be more open in writing than in direct contacts. However, the use of technical devices play significant role in business communication today.

From the situations given above, it is clear that business world is strongly interested in nonverbal communication and its characteristics, especially in understanding how nonverbal communication affects the behaviour of workers and work groups, as well as how this communication influences business contacts and interactions. Furthermore, business people and managers are interested in how nonverbal communication may improve general communication in companies and relationships among members in their working areas.

In that sense, there are a variety of training workshops offered to employees to improve communication skills, including nonverbal skill training. On the other hand, employers more and more realize the importance of nonverbal communication in their business communication and invest more money in this education and trainings. Finally, it is definitely proved that potentials for applying of nonverbal communication to the business settings are huge. Those business people who mastered the skills of nonverbal communication, not only to decode accurately all the signs, but also to use body language in coordination with attitudes they want to project – gained a competitive advantage in their business area.

4. CULTURAL DIFFERENCES IN NONVERBAL COMMUNICATION

Modern business world has become extremely globalized and business communication has been very influenced by that fact. Communication, verbal and nonverbal, has become more complex among various nationalities and knowledge of the possible differences among cultures is essential thing in a today's business setting.

Therefore, particular attention should be paid in the field of nonverbal communication because its manifestations are significantly different among nationalities.

Like verbal communication, nonverbal communication varies culture to culture. As an illustration of this, one study will be presented here. Namely, business meetings of the three entirely different cultures - Brazilians, Japanese and Americans shows us great variations in the amount of eye contact, touching and silence.

	Japanese	Americans	Brazilians
Silent Periods (Number of silent periods greater than 10 seconds per 30 minutes)	5.5	3.5	0
Conversational Overlaps/Interruptions (Number per 10 minutes)	12.6	10.3	28.6
Facial Gazing (Number of minutes of eye contact per 10 minutes)	1.3	3.3	5.2
Touching (Number per 30 minutes, not including handshaking)	0	0	4.7

Source: John Graham, *The Influence of Culture on the Process of Business Negotiations: An Exploratory Study;* Journal of International Business Studies, XVI, no. 1 (Spring 1985): page 84.

Some other examples also prove how strong influence cultural background has on nonverbal communication:

- *For Americans, forming a circle with thumb and forefinger signals 'O.K.'; it means "zero" or worthless in France, money in Japan, and calling someone a very bad name in Germany; putting the feet on the table is a (male) American gesture which is offensive to nearly every other country around the globe.*
- *For some cultures, touching another person is proscribed. These cultures include the people of China, Indonesia, Japan, the Philippines, Thailand, Australia, England, Germany, the Netherlands, Norway, Scotland, America, India and Pakistan. Contact cultures (who use 'touch' with less inhibition) include the people of Iraq, Kuwait, Saudi Arabia, Syria, the United Arab Republic, Bolivia, Cuba, Ecuador, El Salvador, Mexico, Paraguay, Peru, Puerto Rico, Venezuela, France, Italy and Turkey* [6].

In the world of business, an important function of nonverbal behaviour is its symbolic use to signify occupation or status. For example, doctors wear white coats to symbolize hygiene, police wear uniforms to make them recognizable and to lend them authority and chief executives have large offices with thick pile carpets to show their status. The misinterpretations of these nonverbal symbols may cause serious difficulties in communication and may decrease the possibilities of cooperation.

Also, people from different regions of the same country may have different nonverbal behaviour. Thus, people from the south of Serbia would act more energetically in communication than people from the northern parts. Even some differences in facial expression are noticeable. However, the serious research on this topic should be done in order to distinguish the culture varieties among people of the same nation. It is very certain that many differences in nonverbal communication would be found.

In addition, body language is affected by many subcultures of which we are a part. Take posture, for example.

Ballet dancers are trained to hold their bodies chest-forward, so you will often see them standing like this with their heels together and toes pointed out (a modified first position). Many office workers are round-shouldered with a slight slump in the chest from hours spent over their keyboards. Military personnel often carry a shoulders-back, spine-straight stance long after their tour of duty has concluded [1].

Another issue is a business negotiation process which is fairly different between east and west in terms of culture and nonverbal behaviour. People from Western cultures tend to have independent, also called individualistic, performance while people from Eastern cultures tend to have interdependent, also called collectivist, performance. Simply, western people understand themselves as independent or detached from the social groups to which they belong while eastern people understand themselves within the context of the social groups to which they belong. Therefore, *"negotiators in Eastern cultures are more likely to think about negotiation in terms of relationships and that this frame should influence their negotiation goals while negotiators in Western cultures are more likely to think about negotiation in terms of outcome"* [7]. In the context of nonverbal communication, in Eastern cultures that tend to be high context (e.g., Japan and China), meaning is communicated not just by a person's words or acts, but also by the context in which those words or acts are communicated. In Western cultures (e.g., the United States and Germany) the situation is opposite. Low context communication is direct, and although it requires familiarity with words and acts, it does not require familiarity with contexts. The presence of nonverbal communication in negotiation processes is apparent in these cultural patterns of eastern and western world. The direct benefit from nonverbal communication is the example where the American negotiators offered airplanes to the Japanese and they were silent. When the Americans lowered the price, the Japanese continued with silence. Finally, the Japanese accepted the price which was so low and the Americans were completely unsatisfied with this bargain, while the Japanese were surprised with the final, extremely low, price.

If we wish to understand cultural aspect of nonverbal behaviour in business setting, it is necessary to understand the relationship between culture and nonverbal communication. It is not difficult to perceive that culture significantly influences nonverbal behaviour and communication of different cultural groups. People of all cultures learn to use nonverbal behaviours—facial expressions, gestures, distance, gaze, and postures – as a part of their communication, but people in each culture learn to use them in different ways. Some of the nonverbal signs are common to many cultures such as greeting behaviours (the eyebrow raise) and some are completely different (touching behaviours). People all around the world, despite differences in culture, have the ability to express anger, contempt, disgust, fear, happiness, sadness, and surprise in the same ways and, yet, all people learn rules (called "cultural display rules") that govern how to manage and modify these universal emotional expressions based on social circumstances. Examples are the following: "*Americans, compared to Japanese, Poles, and Hungarians, are likely to express more positive and less negative emotions toward ingroup members, and more negative and less positive emotions to outgroups (Biehl, Matsumoto, & Kasri, in press; Matsumoto, 1990). Also compared to Americans, Germans tend to minimize their expressions of negative emotions by deamplifying or neutralizing them, but not by qualifying them with a smile (Koopmann & Matsumoto, 2003)"* [5].There are also many examples where gestures, gaze or visual attention as well as touching and interpersonal space differ a lot among different cultures.

However, one should be aware that we learn cultural patterns for encoding verbal and nonverbal communication from the early childhood. As we grow, we also learn how to perceive signals and interpret messages and that refers to the decoding process. Various "filters" are to be developed during this period and that is also the consequence of the cultural influence.

Finally, the words written above, numerous books and studies, establish cultural difference as an integral part of every communication among people. Particularly, it is very important in modern and globalized business world that every manager, businessman, owns universal knowledge in order to make his business more advanced and successful. Nonverbal communication in today's cultures represents the prominent part of that knowledge and, certainly, competitive advantage.

5. CONCLUSION

The power of nonverbal communication in a modern business world is only partially recognized. The intention of this work was to present and reveal some basic patterns about this mode of communication. Most people emphasize the importance and dominance of verbal communication over nonverbal one. This work proves the opposite, and underlines numerous advantages and hidden possibilities of nonverbal behaviour and communication.

The presence of nonverbal communication is huge. It is used to convey power and status, it is used to express love and intimacy, it is used to communicate agreement, to establish rapport, and to regulate the flow of communication. The thorough research in this area and its application is not widespread. The use of nonverbal communication is universal, possible in every field of our lives. Thus, the research should be done in an extremely precise way in order to be valuable. The business area is particularly sensitive and susceptible to some popular and "non scientific" research done by amateurs. Some books with the attractive titles like "How to Read a Person like a Book" (Nierenberg & Calero, 1991), "Never Be Lied to Again" (Lieberman, 1998), and "How to Understand People and Predict Their Behavior Anytime, Anyplace" (Dimitrius & Mazzarella, 1999) are the pure examples of exaggerations and simplifications of nonverbal communication. This communication is very complex and still greatly unknown. Therefore, it cannot be exploited as something ultimately powerful and perfect. Serious researchers approach this problematic field very carefully and they belong to the various sciences such as psychology, ethnology, communication studies, sociology, anthropology, neuroscience etc. They contributed to this field enormously and proved the significance and complexity of nonverbal communication.

The direct application of nonverbal communication in a business setting has been presented and, hopefully, proved in this work. Still, the author of this work hopes it will help business people and managers of all ages to evaluate nonverbal communication realistically and understand the possibilities it surely offers in the world of modern business.

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