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## **GLOBAL AND INTERNATIONAL BUSINESS AND MANAGEMENT**

### **Abstract**

*The author of this paper has emphasized that complex and strategic issues come up most frequently related to global and international business. There are explanations of global vision, globalization and management philosophy provided, however it has been especially emphasized that management is a science, a theory, an art, a profession and a practice. Also, there are explanations related to definitions of the international management, transnational management, standardization, managing value systems, developing a global and a transnational strategy, and all that with the aim to promote the world economy and business.*

*American management is a dominating philosophy in the world. Furthermore, there are Japanese, Asian and European management philosophies that are increasingly developing.*

*Global managers have strategic perspectives in dealing with other people around the world. Their capabilities overcome national and political borders, integrated and transnational corporations, and their talents are being synthesized. **International managers participate in foreign activities just like those who are globally responsible and are especially sensitive to their own culture and acquire substantial knowledge about cultures and values of other people and countries.***

### **The Phenomenon of Globalization**

Globalization has recently become a key issue of almost every discussion related to international business and strategy.

Currently, the word *globalization* has its firm position in our vocabulary and despite the fact that there is no universal definition this term has started to obtain a new meaning (and descriptive power) at different levels. At its highest level (the economic globalization), globalization refers to the international integration of product and capital markets and to the development and integration of international network of production and services.

There has been a debate about whether a true difference between the concepts of 'globalization' and 'internationalization' actually exists. Moreover, there are many conceptual and ambiguous definitions related to differences between these two expressions, which often interweave. Although it is difficult to conclude this debate, since those who favor the globalization concept believe that the globalization process is marked by the emergence of autonomous global economic structures (e.g. transnational currency and commodity markets) and by the tendency to establish multiple levels of managing economy (at national, regional, international, etc. level) in the context of open 'global' economy. In this respect the strength and economic significance of a nation-state is declining, along with the change in power and influence exercised on international institutions and transnational players such as MNCs and international banks. Globalization is thus viewed as a more developed and complex form of internationalization which indicates that international markets are becoming increasingly more autonomous than states and this emphasizes the role of non-governmental bodies in the development of international economic activity. Unlike this, the main entities in the 'international economy' are national states, with their economic activity dominated by the one among other national entities.

Internationalization can be defined as a process of increased involvement in international operations. Many external stimuli can push and pull a company along the path of internationalization of its operations, some of which are mentioned further in the text:

- unfavorable conditions in the domestic market such as increasing competition, decline in sales, market saturation or recession;
- overproduction or overcapacity which force a company to sell its products abroad or to waste its resources;
- the existence of foreign markets (and rents);
- the will to risk with product diversification and thus minimize a company's dependence on a single market;
- prospects of increased production in order to achieve economies of scale;
- attempts to reduce production cost factors (i.e. wages) and/or to approach natural resources;
- favorable position of currency rate, which makes it cheaper to export and/or invest abroad;
- the scale of profitable partnership and cooperation with foreign markets.

The additional stimuli are related to company's internal environment. For example, information, experience and perception of management will strongly influence the extent to which a company can develop its international strategy and a form and direction of the strategy itself. Managers with previous experience in international operations, or those with a clear attitude towards competitors and opportunities in the international markets, are more likely to induce the company that has already concentrated on local activities to reconsider its position and become international.

### **Global Vision**

A **vision** of an organization is the highest and broadest category of a business goal. It represents a statement of its comprehensive aspirations, and refers to possible and desirable future state of the organization. A vision refers to strategic intentions of an organization (Hamel and Prahalad, 1989, 1994). It is an attempt of a manager to identify the gap between the position that an organization currently takes and the position it expects to reach in the future. Hamel and Prahalad argue that a vision of an organization should be related to its basic competences and its future environment.

A global vision is the main prerequisite of a global and transnational strategy. This means that the whole world is regarded as a potential market, competition is considered as global, activities are directed at exploiting global advantages, activities are globally coordinated and, perhaps most importantly, organization has a global philosophy, ethics (corporate culture) and perspective.

Examples of statements about global vision (Pitts and Lei, 1996) include:

- CNN – 'to be the best and most reliable source of information on any topic, anywhere and anytime'
- Coca-Cola – to ensure that 'Coca-Cola is at hand to everyone' to every potential consumer anywhere in the world.
- McDonald's – 'to be the leading deliverer of quality food to everyone everywhere.'

### **Vision, Philosophy and Transnational Strategy**

Hamill (1992) thinks that a global strategy is largely a 'business philosophy, i.e. a way of thinking'. Therefore, it is important to understand how far the business is globally oriented. Prelmutter

(1969) argued that a company value system, its history and development, its methods and practices, its vision and corporate culture, shape the management perspective of a global strategy.

Among useful frameworks for categorization of organizational philosophy is the one known as an EPRG matrix. Company philosophy can belong to one of the four categories. **Ethnocentric** philosophy is the one in which there is a predisposition towards home country based on the belief that domestic industry is superior. **Polycentric** philosophy is oriented towards a host country (or a foreign market), but emphasizes the adaptation to local conditions at other locations. **Regiocentric** philosophy is an approach which emphasizes the orientation towards regional country groupings, for example, Europe, North America or Far East. Finally, there is **Geocentric** philosophy which implies a global approach to business.

Each philosophy has implications for a potential strategy of a company that adopts it. Ethnocentrism implies that foreign markets are considered inferior to a domestic market and a strategy adopted is the same as the strategy on the domestic market for the same product being offered. Polycentrism results in a multidomestic strategy which completely adapts to the demands of every national market. Regiocentrism refers to the regional coordination of a strategy, but not globally. Geocentrism suggests that a strategy is developed globally and is not determined by home or host country factors. Managers need to assess company's main philosophy and determine how far this philosophy should support and stimulate **transnational business approach**.

### **Management**

A large number of scientists and managers, through their practice, have come to a conclusion that management analysis is largely facilitated by the efficient and clear organization of knowledge. Therefore, it is necessary to point out the five management functions: **planning, organizing, staffing, leading and controlling**.

Management can be applied to every form of organization. It is also utilized by managers at all organizational levels. The goal of all managers is the same – to make profit. Management also deals with productivity, efficiency and effectiveness.

Some scientists have organized management knowledge according to managerial tasks.

There has been a significant improvement, since this approach is based on the assumption that everything is a job of a manager. However, this approach has some limitations. Therefore, we often emphasize a role of a manager in creating internal conditions aimed at doing the job properly. However, we should never oversee the fact that managers do their job in the environment as well, which is an integral part of the business, just like the job within the company. It is obvious that managers cannot successfully perform their tasks if they do not have necessary knowledge about the elements of the environment and problems which occur there, as well as about the ways of solving them. These elements are economic, technological, social, political, as well as ethical factors. The task of a manager is to organize individuals so that they contribute to common goals. Management can thus be applied to small and large organizations, to manufacturing and non-manufacturing companies, and equally to manufacturing and service industries.

All phases of management are permeated with communication as a classic process. It is used to integrate all managerial functions and it enables a normal course of doing business with the external environment. For example, the established goals are communicated to create an adequate organizational structure. Communication is particularly important for evaluating, efficient managing and motivating employees. Furthermore, the purpose of communication is to determine whether the events or procedures correspond to the plan. In that manner the implementation of actions is accomplished by management.

**It is a task of management** to provide and utilize company inputs and help them transform into outputs through their managerial functions. The essential goal is to secure satisfying not only the basic material needs of the employees, such as earning money to meet basic needs and secure their work posts, but also the need for employing people, accepting them in the organization, and providing respect granted to all, and even because of effectuating the time we live in.

There has been a question whether **management is a science or an art?** Just like any other job, like composing music, dealing with engineering, accounting, even sports, management can be regarded as an art. That is something that one should be versed in. It means working in actual situation. However, it is necessary for managers to use proper knowledge on management to be able to perform their jobs. That is exactly the knowledge what lacks a substantial elaboration. Consequently, management can be considered as an art in practice, and the proper and organized knowledge applied in practice can be treated as

a science. In that context, science and art do not exclude each other, but they are complementary. Both science and art are evolving (just like physical and biology sciences). Actually, there has been neither considerable analysis of the science of management yet, nor it is exact enough. That is a consequence of a number of very complex variables that managers encounter while performing their tasks. The degree to which the knowledge is available to managers could certainly promote the managerial practice. By neglecting advantages provided by science, a surgeon will probably be treated simply as a witch-doctor. Bosses who attempt to manage without utilizing science have to rely on luck, intuition or experience. In management, as in any other field, you learn through trail and failure (it is said that managers usually attribute their own mistakes to their subordinates). Rational managing is possible only by applying knowledge gained in practice.

### **International and Multinational Business**

The expressions of **international, multinational and global** business are often used together which can lead to misunderstanding. It is important to make a difference among these terms. The range of international business activities can be identified depending on the nature and volume of business engagement on international markets and the degree of coordination and integration of geographically dispersed operations. It is important to make this difference due to the fact that strategic and management issues which an organisation faces significantly vary depending on the scope of its international presence.

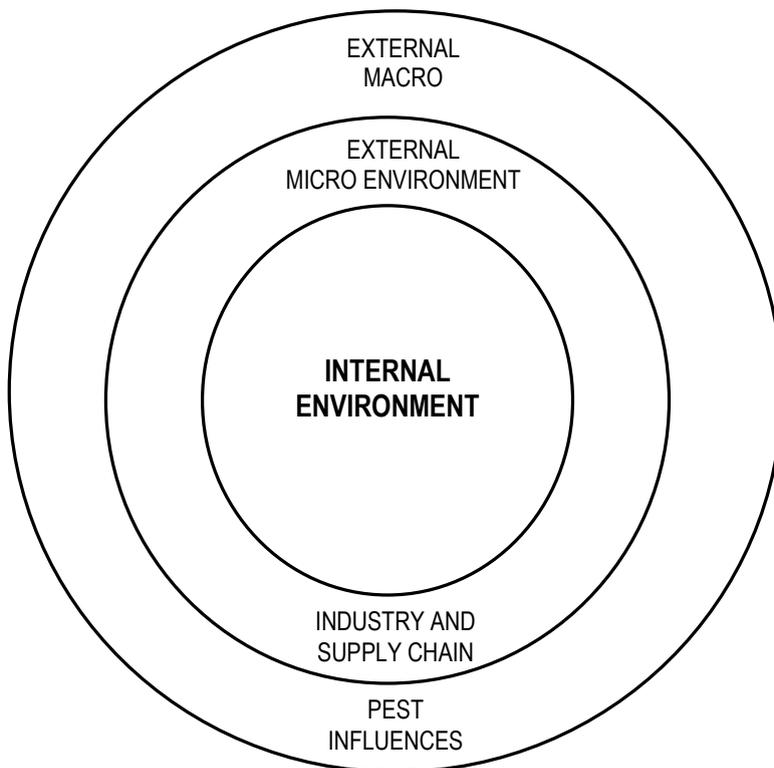
The expression **international** simply means that **a company operates in more than one country**. A company which is **multinational operates in several countries**, but Bartlett and Ghoshal (1989) argue that the term points at a certain decentralization of management decision-making and transferring it to subsidiaries abroad and little coordination of activities outside of national borders. This is quite contrary to what we define as **transnational business**.

### **Global and Transnational Business**

The expressions **global and transnational** should be used more carefully because they have a more specific meaning. According to Levitt (1983) a global market is the one where consumers have the same needs and preferences everywhere in the world. But the term global does not refer only to markets, and it is used to show a potential

global range of all business operations of an organisation and its ability to compete globally. Bartlett and Ghoshal (1989) use the word *transnational* to describe configuration, coordination and control of global activities across national borders aspiring to global competitiveness. Both markets and ways in which international companies configure and coordinate their activities become **global in volume and transnational in nature**. This is actually a process of developing global and transnational strategies and management and coordination of operations all around the world.

Figure 1: **Business Environment Scheme**



Source: Zecevic, M., *Global and transnational business and management*, European University, Belgrade, 2008

Figure 1 shows a Business environment scheme.

### **Levitt and Standardization**

The expressions *globalization* and *global business* have drawn much attention in academic as well as in other circles ever since the publication of Levitt's influential article, 'Globalization of Markets' in 1983. According to Levitt, in recent decades, technological changes, social, political and economic development have directed the world towards a 'global village' or 'converging community' – homogenized, unified global market in terms of consumer taste and product preferences. Main users of this convergence will be global organisations that produce globally standardized products in order to create a world economy of scale. These global companies can (thanks to economies of scale) reduce prices of more nationally oriented competitors.

The publishing of Levitt's article spurred a debate about to what degree of cultural convergence between countries has been achieved and to what extent companies should or should not standardize their marketing on a global scale. Douglas and Wind (1987) have raised a question of globalization and the need for standardized global strategies and products. They claim that there are many barriers to standardization of products and strategies, and that higher rates of return can be made by adaptation of products, production and marketing strategy to the needs of specific markets. Although they accept that some markets are global, there are many others where this is not the case.

### **Global Approach to Strategy and Management**

There have been various attempts to make a case in which management philosophy and techniques of a country or a region are superior to others. For example, it has been believed that American and Japanese techniques are the true example of a good practice. If it is so, we can assume that the development of some sort of a global approach to management is possible. It is certain that in management theory, there are some global trends such as Total Quality Management, Knowledge Management, etc. but fundamental differences still remain in the approach among managers.

It is claimed by Doyle (1996) that a focus of international management varies from country to country. American and British managers insist on maximizing 'shareholders value' by getting attractive return rate on invested capital. It is different with the

Japanese, German and Korean companies that consider as more important the achievement and leadership in a market through the improvement of consumer satisfaction with their products. There are significant dissimilarities in the way these two groups determine strategy. In the Anglo-American group, the adopted approach focuses on acquiring the financial budget necessary for the achievement of the target return on investment. This approach has been criticized as being a short-term approach to business strategy. In the latter group, the companies emphasized the importance of research and development, innovation, brand building and supply chain management in order to increase consumer satisfaction. In other words, it is obvious that there is no single global approach to management and strategy in the companies around the world.

Martin (1997) has emphasized that ‘to be global is not the only possible approach to business challenge of the 21<sup>st</sup> century. It is also sustainable to create a company strategy which will protect a domestic market.’ For transnational business, strategic challenge of the 21<sup>st</sup> century is to combine global volume with the possibility to react quickly and provide flexibility necessary to compete with local producers. It is also necessary to balance out the globalization pressures resulting from the use of economies of scale, as opposed to the need for a flexible response to increasingly unstable consumer preferences. On the other hand, companies that decide to defend their local positions instead of becoming global will succeed only if they are prepared for the changes which are taking place at the global level.

There are numerous examples of global players facing successful local competitors. In the global fast food market McDonald’s faces a strong local competition in France and Belgium from Quick and in Greece from Goody’s which have a significant market share, but are certainly not global competitors. Similarly, Coca-Cola and Pepsi-Cola compete with Barr’s Irn Bru, a soft drinks producer from Scotland with a market share of 25%, but it is literally unknown outside the United Kingdom. Therefore it is sometimes necessary to make local variations in strategy to face the local competition.

### **Global Competitive Advantage in the Future**

All these turbulences and hyper competitive business environment are jeopardizing the achievement, and what is more important, the maintenance of the competitive advantage. A learning organization is at the very essence of these basic competences, i.e. the

essential competence is actually based on the knowledge of the organization. The rhythm of changes means that knowledge is constantly changing in time so that organizations should *learn* in order to set their focus on creation and management of knowledge which is considered to be in the essence of the competitive advantage (Stone-House and Pemberton 1999).

### **Knowledge-based Strategy: Intelligent Organization**

The increased rhythm and unpredictability of changes in global business environment make flexibility and adaptability become increasingly critical for the sustainability of competitive advantage. The speed of response and pro-activity depend on the ability of both individuals and organizations to learn faster than their rivals. Organizations should become 'intelligent' by trying actively to learn about their internal and external environment and their mutual relationships. In order to learn faster than competitors, it is necessary to develop understanding of the nature and process of organizational learning and management knowledge.

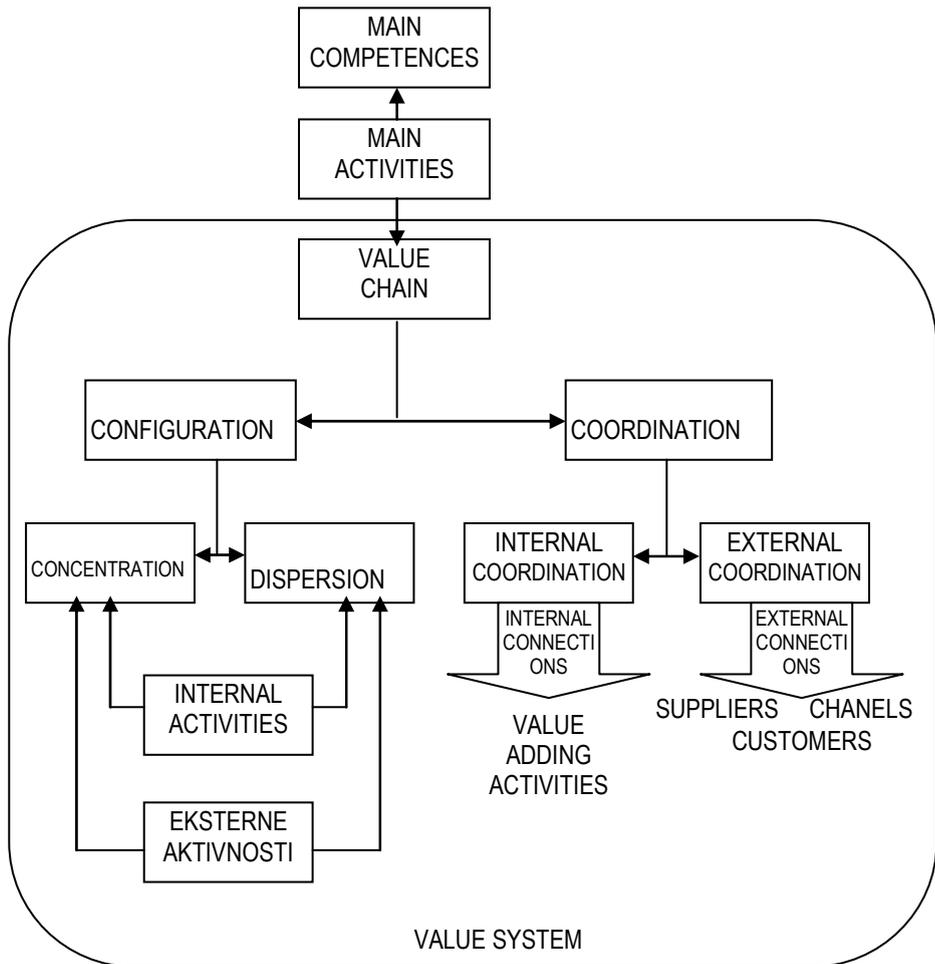
Since organizational learning is not linear (Argyris 1997, 1992) it is represented by a series of knots. Organizational learning and knowledge are based on individual knowledge which needs to be formalized and memorized in proper formats for dissemination and diffusion throughout the organization. Management knowledge in an 'intelligent organization' will be based on culture, structure and infrastructure which stimulate and support the creation and development of knowledge.

### **'Global' Value Chain. More Complex Value Chain.**

Globalization offers new possibilities and new challenges to structuring coordination of activities for value adding (Proter, 1986, 1990). Structuring organizational activities refers to where and in how many countries each activity in a value chain is performed. Global companies can carry out the structuring of their activities and use both global and local advantages. Coordination refers to management of internationally dispersed activities and their connections. It is the coordination of globally dispersed activities what is of course very complex matter, but its very complexity offers significant potential for the achievement of competitive advantage. Therefore managers need to consider the existing structuring of activities for value adding and

the volume of the coordination method as a part of strategic analysis. This analysis enables determination of a possibility for a new structuring or improved coordination.

Figure 2. Value System Management



*Source: Zecevic, M., American and Japanese Business, European University, Belgrade, 2007*

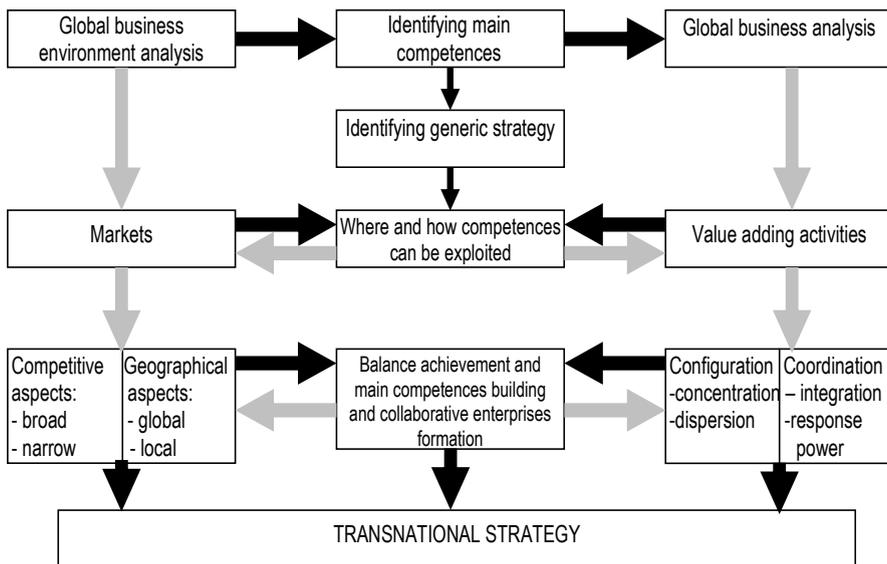
Figure 2 shows the process of value system management.

### **Transnational, Global and International Business Strategies**

A successful international strategy should create and then sustain competitive advantage outside national borders, whether on regional or worldwide basis.

Global, regional and multi-domestic strategies used to be considered the only alternative to an international strategy. The key concept which emerged at the end of 1990s was a transnational strategy. This concept combines efficient results of a global strategy (with economies of scale) and the advantages of local response.

**Figure3. Global and transnational strategy formulation**



*Source: Zecevic, M., American and Japanese Business, European University, Belgrade, 2007*

Figure 3 shows the process of transnational strategy formulation. It comprises various approaches to global strategic management. The approach is also ‘from within to outside’ in that the importance of simultaneous, stable and repeated internal and external

analyses of a company and its environment is accepted as an inseparable part of the development process of the basic competences of a genetic and transnational strategy.

### **Choosing the Best Strategy**

Choosing some of Dicken's alternatives understands creating the balance between the economy of scope that should be achieved by specializing facilities and the extra costs of transferring goods either among facilities or from the facility to the market. Other factors that also should be taken into consideration are the risks related to specializing facilities, whether producing locally is really necessary for adapting products to certain requirements and the government policy on stimulating or discouraging investments and tariffs. The internal production network is also highly dynamic and susceptible of fast alteration due to changes in the external environment of the organization and internal pressures that might demand initiating reorganization and rationalization.

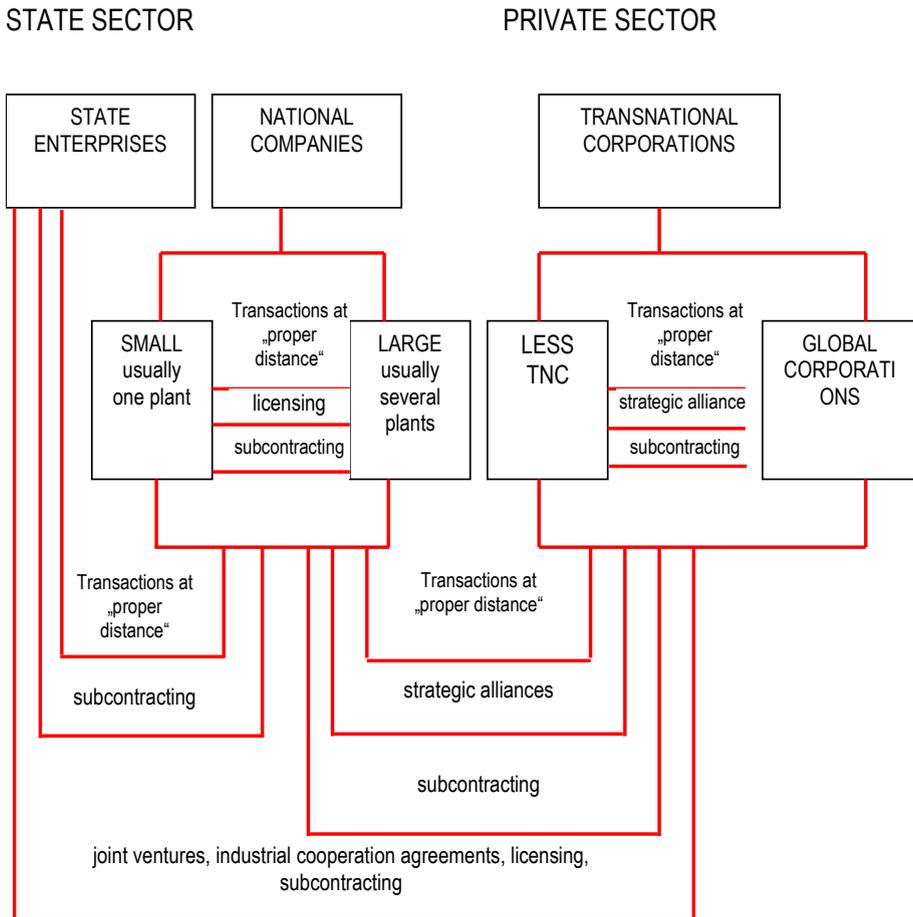
Besides underlining the internal network, Dicken (1998) has emphasized the importance of external networks.

International organizations often have many external connections with other companies. These connections may be with local companies (both large and small), state-owned or private organizations.

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**Figure 4. Main segments of an organization in a global economic world (according to Dicken)**



*Source: Zecevic, M., American and Japanese Business, European University, Belgrade, 2007*

Figure 4 depicts main segments of an organization in a global economic world (Dicken, 1998).

**PROF. DR. ROBERT TROSKA,**  
*President of Czech Committee for Scientific  
Management*



Robert Troska (MS, BA. Ing.) is the founder and executive director of the RITMO (Rationalization, Innovation, Technical development, Management, Organization) Company. He is internationally known as a creator and coordinator of interdisciplinary teams over the last decades. These teams are working in four areas.

1. Application and implementation of new technologies and technical procedures.
2. Industrial enterprise construction.
3. Public administration area.
4. Real Ethic and Personal Philosophy in management.

The interdisciplinary teams carry out necessary analyses, project, construction and mediation – from Design to Turnkey Service.

He is the chairman of the CCSM (Czech Committee for Scientific Management). His team discovered recently new research ways in the HRM (Human Resources Management) area in the Science and Technology section of CCSM. He has published special publications in the fields of Real Time Control Systems, Production Engineering and Management.

## **CONTEMPORARY THEME FOR CHIEF OF EXECUTIVE OFFICERS IN EUROPE**

The main theme is to be more competitive. From this point forward we should consider about the future of the company. A manager was monitoring company processes, his desire was for a stepless control.

Company order, discipline and smooth working process are not enough in this day. In this day and age it is necessary to seize opportunities and react quickly to make best use of innovation, modernizing suitable processes including technology. New managers should track the market, monitor competitors in order to create their own best practices.

Corporate governance moves from controlling in-service inspection of capital and financial areas to participation in strategic development including an entrepreneurial prospectus. The way of corporate governance is from control to entrepreneurship. The lead idea is a promising strategy. No longer based on SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis, but using the free, creative activity of company management. It means we are moving from information to knowledge and then to cognitive science. Marketing is improved by use of filtering connected not only with the market, but with the customer. Marketing is able to solve new tasks with the help of e-business today.

When innovative activity is intensified, everything changes. The company organizational structure loses sight of who is company leader for the sake of obtaining new opportunities. The manager is not yet ready for the new role. During the last decades the manager was able to determine procedure, norms and control. However the abilities do not suffice for competition and excellence.

There comes a time when it is necessary to replace a manager with a company leader. There have been are many attempts made to define who is the perfect company leader. The most brief and appropriate definition is perhaps: **“It is the person who carries the future inside”**.

Simple and direct personal management style has never-lost its importance. The same significance has an unstick from zero rate paperwork, faith and mutual agreement.

### **PERSONAL PHILOSOPHY IN MANAGEMENT**

The afore mentioned company leader is connected to the **personal philosophy factor** everywhere and every time. What is the personal philosophy factor and how could it be investigated and strengthened was researched and developed in the CCSM within the last decade. Essentially it is the new possibility of improving dealing, self-confidence and self possession including HRM.

Some may recall the author-writer Mr. Dale Carnegie is credited with introducing behavioral psychology for dealing with commerce, industry, services, public administration and politics within 20th century. While development in this area has continued, the behavior psychology is not yet sufficient. Nowadays trends target personal philosophy. For instance, the foremost business philosopher Mr. Jim Rohn (USA) said

- Economic disaster begins with a philosophy of **doing less and wanting more**.
- If you want to amend your errors, you must begin by **improving** your philosophy.
- Your personal philosophy is **the greatest determining factor** in how your life works out.
- The key factor that will determine your financial future is not the economy , **the key factor** is your philosophy.

The result is as follows. If we want to change anything in a corporation, then we must go deeply into the employee consciousness.

CCSM has been carrying out Personal Philosophy research in its Science and Technology section for the last decade, resulting in three axioms. This new solution of Czech origin was published (Copyright 2008, ISBN 978-80-254-2184-0). Regarding the information explosion a man needs summarized facts from both old philosophies and modern knowledge. The three axioms were created to minimize the amount of knowledge required initially but enabling personal expansion at a later date. The aim is to activate the managers thinking in a logical way about how the life system functions.

The successful assumption of every corporation is based on vision objective including strategy and these activities depend on managers and other employees' level of personal philosophy.

Reasons why to be concerned with personal philosophy factor are:

- Advantages of dealing with the problem and conclusion.
- Human Resources Management – employee evaluation.
- Personal reason of every human in extreme and border – line circumstances.
- If a person suffers from heavy loss i.e. he finds himself **without money and property**, or his **close relative has died**, or he discovers that he **suffers from a fatal disease**.

Then everything depends on your personal philosophy as to whether it helps one get over obstacles either physical or mental.

People with the steady personal philosophy are believable and have natural authority. The managers have to receive information leading either to an increase in cognitive knowledge or to the base creation of their own personal philosophy.

The employee efficiency depends on his personal philosophy, healthy, knowledge, skills and motivation.

**Prof. Ing. Jaroslav Jirásek, DrSc.**

## **THE SCIENTIFIC MANAGEMENT IN EUROPE**

### **The early beginning**

For the first time the term “scientific management” has been presented by Frederick Winslow Taylor in The United States of America by 1910. We have to be careful to understand and apply it properly. The American “science” at that time was close to “measuring and computing”.

The European explanation of science was, and to a certain degree still is unlike the original, Grecian sense of science as the well advanced expert knowledge. The proper understanding of “science” is, at the same time, a European intellectual advantage, Taylor’s first name for his method has been “task method”, but later, after a number of controversies, he used to explain, that he was doing nothing else but what he was “dictated by science”. Any work operation can be accomplished by the “one best way” and that procedure can be revealed and reflected by a consistent analysis.

Taylorism has been adopted and studied in all European countries. Well known for its achievements was Czechoslovakia. Therefore the first international meeting on scientific management was convened to Prague. In the Czechoslovak capital was founded The International Organization of Scientific Management (Comité internationale de l’organisation scientifique, CIOS) which then moved around the world.

The initial activities in business management were associated with outstanding personalities. In France with Henri Fayol (at that time also general director of Steel Works), in England colonel Urquart. A lot of original projects were accomplished in Poland. In Czechoslovakia the main expert was Frank Gilbreth (and his wife). He died on the way to the Prague international congress (the meeting was moderated by Ms. Gilbreth).

Europe together with the United States became the cradle of business promotion. Each country contributed in a specific way. Such was the general picture of science in management until WWII.

### **Science in management after WWII**

Scientific style was incited during and after WWII. The general staffs of the armies were supplemented by scientific bodies which developed a number of scientific approaches, which were completed and became cores of new “big sciences”, such as cybernetics, theory of systems, theory of information and communication and transportation, strategy, risk taking, operations research. Almost all of them became mutilated. The most regrettable loss is the degeneration of the theory of systems, which sank to “systematizing”, i.e. orderly arrangement. However, the massive support by science, despite all mistakes, enhanced the scientific quality of management activities. It may be observed that scientific quality gets higher in growing companies. The first billionaire (wealth in dollars) emerged in 1905.

Around 1930, it was A.A. Berle, who announced a novel type of the company. So far, the leading type was a family owned and created company. But the most dynamic growth began to mark the “corporation”. The predecessor was a new definition of financial liability: up to the stock incorporated. The number of corporations began to precede very fast the number of family companies. At the moment, from one hundred largest companies in the world, ninety seven are corporations. The size of the largest ever corporation grew three hundred and fifty times in one hundred years.

From WWII, the United States issued as the largest, most productive and powerful country of the world. That was true until the end of the 20<sup>th</sup> century. By the end of the century China emerged with the fastest increasing domestic product and second in size worldwide. (China anticipated the so far second Japan. Within ten following years China could occupy the first place globally.) The second half of the 20<sup>th</sup> century was full of changes in business promotion. Peter Drucker, the tireless commentator of management said: “the only constant in the future will be change”.

At the beginning of the second half the leading subject-matter were the scenarios and predictions (Hermann Kahn, Hudson Institute). In the sixties, Thomas Peters introduced the target of excellence, which moved the whole system of business deliberations and calculations remarkably ahead. In the eighties it was Jack Welch, the chief executive officer of General Electric, dominated some ten years of leading the front of business by conquering the first two places in

anything – of the twelve industrial braches - he was manufacturing and delivering.

### **The changed European shape**

The current picture of business in Europe displays a number of differences. Europe (the name of the daughter of Agenor, king of Phoenicia) is a large continent with around five hundred million population in thirty five ethnic entities.

After WWII the United States were used as a general model of efficient Capitalism and the worldwide leading country in economic performance. That is no more right. Leading in performance are the Nordic, Scandinavian countries, namely Sweden, Finland, Norway, Denmark. Almost on the same level of performance are Germany, France, the Netherlands, Luxemburg. Therefore, the picture of science in the European business is rather inconsistent.

Europe is going trough a unification of most countries, adopting unified legal rules, most of them pay with the same currency (euro). But some six countries, out of twenty seven, so far, are facing difficult economic troubles (which will diminish their pace of development). The BRIC countries (Brazil, Russia, India and China), a half of the world population, are growing unlike the United States, according different plans. All of them are growing faster then America. After the roll down of the Berlin wall, Germany was divided into the German Democratic Republic and the Federal Republic of Germany, the Czech Republic and Slovakia were separated and all eastern territories were part of the Soviet block.

Now, all Europe, with a couple of exceptions, is Capitalist. The trends of judgment and decision making have been perverted. It is no more the creation of new and higher material or spiritual values, but accumulation of profit. New possibilities and new problems are to be resolved.

### **The message of the global crisis**

After 2008, a deep global crisis surprised the world. In 2006 the Congress of the United States invited a number of university professors and experts to inform members about the general economic situation. The development looked good. But a professor of New York, Mr. Roubini, announced a large-scale disorder coming soon. Something not witnessed for at least eighty years. The moderator of

the meeting declared a break to be followed by a drink. The audience smiled. But in two years, the devastating crisis arrived. It may be mentioned that another prediction had been declared two years before the American forecast, by Prof. J. Jirásek, in Prague.

The general view of the economic and political development is certainly not satisfying. The pace of development is slow. Conversion of scientific findings into profitable innovations lies far behind the discoveries. Education in many countries – including the Czech Lands – is gradually falling, certainly is not as good as it had been twenty or thirty years ago. Technological progress is obviously delayed. All similar facts stand for an unpleasant image of the economic and political immaturity.

What are the principal reasons of the crisis?

They are many. Let us pick up three.

1. Invested capital and finances exchanged their role. As a rule, it used to be capital that put finances into motion. The economic process had a mission to produce something new, something that enriched our outer reality. However now, very often, the capital became subordinated to finances, as a matter of fact converted into finances and the “financialization” enables to avoid any constructive creation, but make money directly from money.

2. Work used to be a life-long activity of individuals. But now, work is rather often not long-lasting, “precarious”, interrupted, adjusted to customs, not absorbing the growing education or creating an accumulated experience. European unemployment is permanently close to ten percent of employable people.

3. The productive forces of the economy, so far mainly associated with technology, are shifting to intellectual forces, much more fertile and pushing the performance to so far unrivalled heights. The productive “brain work” depends on education, professional erudition and practical cultivation.

So, what will be next? Gary Hamel, Director of an institute at Berkley, a leading personality in contemporary business, published a new book on future management (*Management of the Future*, 2006), in which he announced “a profound change, which will surpass anything we could have imagined in the past eighty years”. A roaring challenge! But with no response.

Managers do not answer. Why? Gary Hamel explains: How could they? They are doing something completely different. They will

need at least fifteen years to understand and learn the new style of advanced business. From, let us say, one thousand existing American companies, Gary Becker continued his remarkable prophecy, only one has the leadership capable to lead its business in the proper way, Something like that happened in the thirties, with a massive demand for a new business knowledge (graduate schools were established, business insight was offered by new analytical approaches, such as the “case method” /implemented at Harvard by the Czech professor S. Taussig/, new teaching programs and new literature.) Many managers in the thirties went astray and had to be exchanged. Will that experience be repeated?

The American prediction of a substantial diversity of business knowledge has inspired an extending group of European followers. Thousands of experts are working on the shift of principal business promotion, or on a new style of business deliberation, decision making and future thinking.

Many especially young people are considering their making money, founding a family and using their leisure time having their mind reoriented by the idea that in less than a quarter of century there will be a different and intellectually more demanding business practice. To get ready will take endeavor and time. Individual companies decided to open “scientific based education” of top managers.

### **Why so extreme accent on management development?**

Management, correctly cultivated, is a part of societal culture. It promotes research, pedagogical mastery, adjoined agenda, however also develops personal image and makes contribution to the world we live in. In brief, higher business knowledge as well as smartness assists in the whole refinement of life.

We are addressed by novel sway of discoveries, such as nanotechnology, space of universe, automation and robotics, fast changes in biotechnology and medical science, etc., or new ways of thinking in philosophy and sciences, engineering is beginning with digital and smart systems...Business promotion has to take hold of all new findings.

Progress in business management is an indicator of a general intellectual movement onward.



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1964 - Doctor's Degree in Law at Cluj; Professor of Law at the Social and Political Sciences Academy; at the School of the Ministry of the Interior; Professor of International Law (Human Rights and the Law of the Sea); Member of the Central European Academy of Science and Art; President of the National Committee of the Central European Academy of Science and Art; Deputy Director General of the International Biographical Centre, Cambridge, England; Member of the International Diplomatic Academy; Member of the Balkan Academy of Science; Member of the European Academy of Science.

Participation in more than 300 national and international meetings and conferences regarding the progressive development of International Law, particularly in the fields of the Law of the Sea and Human Rights.

Over 500 studies, surveys and monographs regarding the progressive development of International Law, especially in the fields of the Law of the Sea, Human Rights and Peaceful Settlement of International Disputes.

Scientific Awards: *MEDAL OF REVOLUTION* for his special merits to the victory of the 1989 ROMANIAN REVOLUTION; "ANDREI RĂDULESCU" *PRIZE* by the Romanian Lawyers Union; "COMMANDER of the World Order of SCIENCE – EDUCATION – CULTURE"; by the European Academy of Informatization; Nominated at NOBEL PEACE PRIZE for his contribution on the Human Rights Cause in the World; National Order "ROMANIAN STAR in rank of Cavalier"; "VESPASIAN PELLA" – Prize by the Romanian Lawyers Union; "DIMITRIE CANTEMIR" – Prize by the Christian University Dimitrie Cantemir

**THE MAIN REQUIREMENTS OF MANAGEMENT TO  
COMBAT THE EFFECTS OF GLOBAL FINANCIAL CRISIS  
ALL OVER THE WORLD, INCLUDING CENTRAL AND  
SOUTH-EAST EUROPE**

**Abstract:** *In this study, we have underlined that the main requirements of management to combat the effects of global financial crisis all over the world, including Central and South-East Europe, are – at least – the following: a. To find out the causes of this crisis; b. To establish priority measures in order to limit and to combat the effects; c. To define – as much as possible – the role of institutions; d. To develop cooperation between institutions; e. To encourage initiative and creativity in all sectors, in order to guarantee the normal development of the economy.*

*The Central and South-East Europe has some important characteristics: a. many countries of this region have been – for more than forty years – under the influence of the Soviet bloc management; b. Part of these countries have abandoned the old management through the 1989-1991 years revolutions; c. In this moment, the most Central and South-East European countries have become members of the European Union, and have adopted the free market economy management.*

**Key-Words:** *management, Central and South-East Europe, financial crisis, combat the financial crisis effects, cooperation between institutions, European Union, G20 – industrialized and emerging countries*

**I. THE MAIN REQUIREMENTS OF MANAGEMENT  
TO COMBAT THE EFFECTS OF THE CRISIS AT THE  
GLOBAL LEVEL**

Peter Drucker – the father of management science – underlined in his main book, *The Practice of Management*, that the most important of efficient management, at all levels, national, regional and international, is to have “objectives defined in a clear manner”<sup>1</sup>.

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<sup>1</sup> Peter Drucker, *The Practice of Management*, 1954, see Kaplan, 2010.

At the Davos World Economic Forum<sup>2</sup> has underlined that the global financial crisis has serious consequences on all sectors of the economy<sup>3</sup>. Many enterprises had to close the door and unemployment get the highest level in last decades<sup>4</sup>. The leaders of industrialized countries and emerging economies – during the important international debates<sup>5</sup> – are trying to find out the appropriate solutions to limit the effects of this financial crisis<sup>6</sup>. We can say that at national and international level some options are now on the way<sup>7</sup> and – in this study – we are referring to them<sup>8</sup>.

As it is known, in the second half of 2007 and the first ten months of 2008, the financial crisis has been felt more in some countries, especially in the United States, since October 2008, the financial crisis has become global in nature. The efforts to combat the crisis have involved national, European and universal institutions, and an analysis of the role of these institutions is of uttermost necessity.

In November 2008 José Manuel Durão Barroso, President of the European Commission draws the attention that *exceptional times require exceptional measures*, because *the employment and welfare of our citizens are at stake*<sup>9</sup>, and Nicolas Sarkozy, President of France who was also the President of the European Union at that time, stated that *we cannot continue to lead the economy of the XXIst century with the instruments of the economy of the XXth*<sup>10</sup>. President Sarkozy emphasised that the EU has an important role to play in the efforts to combat the global financial crisis. *We are confident* - he pointed out - *that working together we will overcome the current challenges and we*

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<sup>2</sup> See the debates of the World Economic Forum, Davos, January 26-30, 2011.

<sup>3</sup> The Common Rules for a new reality, Davos, January 27, 2011.

<sup>4</sup> Some conclusions on the effects of this global financial crisis have been underlined on April 2009 Summit of G20 in London, Great Britain.

<sup>5</sup> See the European Summit in Brussels, on November 7, 2008 ; the Summit of G20 in Washington, on November 15, 2008 ; the Summit of G20 in London, on April 2, 2009.

<sup>6</sup> *Ibidem*.

<sup>7</sup> In particular, after the Summit of G20 in London, on April 2, 2009.

<sup>8</sup> In order to underline the main conclusions of the leaders of the World on combating the effects of this global crisis.

<sup>9</sup> Jose Manuel Durao Barroso, *Statement regarding the measures combating the world financial crisis*, Brussels, November 26, 2008.

<sup>10</sup> Nicolas Sarkozy, *Statement at the Conference on the Closure of the European Union Summit*, Brussels November 7, 2008.

*will restore the stability and prosperity of our economies*<sup>11</sup>. Outstanding personalities, knowledgeable researchers have carried out analysis relating to the ways and methods to combat the current crisis<sup>12</sup>. Triggering global financial crisis is the subject of diplomatic negotiations at the regional level but also globally and the most appropriate measures to limit its negative effects, but – especially – the causes that triggered it are being searched for. It is obvious that the most sustained diplomatic activity to combat the consequences of the global financial crisis is held by the European Union, on the one hand, and some groups of states sharing common interests, but also having the capacity to impose a certain way in the financial relations at national, regional and global, on the other hand. It was found that - of those groups of countries - G20, established in 1999, took the initiative of diplomatic negotiations dedicated to urgent and effective strategies. However, G20 has been preceded by consultations and negotiations at the European level.

### **§ 1. The involvement of national, regional and universal institutions**

Given that crisis - manifested in various forms (especially as a mortgage in the United States) over the past year and a half - came out after the Lehman Brothers Bank crash, with “almost unimaginable consequences”<sup>13</sup>, the French Presidency European Union took the initiative of negotiating and adopting “urgent measures to stop the consequences of the crisis at the European level and worldwide”. The personality who has shown “clairvoyance and realism” in these “troubled times” was the French President, Nicolas Sarkozy, who was also President of the European Union. His message - not only to the

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<sup>11</sup> Nicolas Sarkozy, has stated that the European Union will cooperate with the other world's powers to reach this objective agreed by G8. “*I wish that on this subject matter, We the Europeans are entirely unite*” (*Ibidem*).

<sup>12</sup> Letessier Jean Yves, *L'Europe économique et son avenir*, Ed. Armand Colin, Paris, 2008; Artus Patrick, *La crise financière*, Ed. Descartes, Paris, 2008; Chevalier Jean Marie, *Où va l'économie mondiale?*, Ed. Odile Jacob, Paris, 2002; Jaques Attaly, *300 décisions pour changer la France*, Ed. La documentation française, Paris, 2008; Eric Delbecq, *Quel patriotisme économique?*, Ed. Puf, Paris, 2008; Jean Luc Greau, *La trahison des économistes*, Ed. Gallimard, Paris, 2008.

<sup>13</sup> Henri du Limbert, “Sarkozy's Economic Patriotism”, *Le Figaro*, October 24, 2008.

Member States, but also for other States as well, was firm and consistent: “I want that on this matter (the financial crisis - note ns.), We, Europeans, to be entirely united”<sup>14</sup>. Sarkozy said that “this crisis marks the beginning of the <genuine Exist century>”<sup>15</sup>.

First, the French Presidency organized consultations with some countries, including Germany, Great Britain, Italy, Spain and with the President of the European Commission José Manuel Durão Barroso, then, on Friday, November 7, 2008, convened the leaders of the 27 member states with a view to set up a *concert program of measures*, assumed by the European Union, and then promoted worldwide<sup>16</sup>. Among the measures negotiated by the EU French Presidency, the most important ones focus on: a. the involvement of national institutions; b. the involvement of European institutions, c. the universal involvement of institutions in combating the effects of global financial crisis. Although the views of European leaders regarding the *means to combat the crisis* were different a consensus on the imperative necessity that these means should be applied both at national and European level and worldwide came into shape<sup>17</sup>. Nicolas Sarkozy negotiated with Angela Merkel, German Chancellor, with Gordon Brown, and later with David Cameron, Prime Minister of Great Britain, and discussed the measures with the President of the European Commission, José Manuel Durão Barroso. The French President considered as “*urgent and necessary*” to organize an international summit to discuss “*practical ways*” to combat the global financial crisis. On November 15, 2008 the works of the “Group 20”, were held in Washington, where several immediate measures to limit these effects and to eliminate the causes of the crisis were outlined.

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<sup>14</sup> *Ibidem*.

<sup>15</sup> *Ibidem*.

<sup>16</sup> Gaëtan de Capèle, “The Moment of Truth”, *Le Figaro*, October 13, 2008.

<sup>17</sup> Gideon Rachman, “Financial Crisis Redefines Political Leaders”, *Financial Times*, October 14, 2008.

## **§ 2. Solutions proposed by the industrialized and emerging countries Group**

Established as a “**consultative Forum on international financial issues between the largest and most influential economies in the world**”, Group 20 was founded in 1999 and included South Africa, Saudi Arabia, Argentina, Australia, Brazil, Canada, China, South Korea, France, Germany, India, Indonesia, Italy, Japan, Britain, Mexico, Russian Federation, United States, Turkey and the European Union - entitled to express its point of view, by its President in exercise based on the principle of rotation. “Group 20” comprises two thirds of the world's population, represents 85% -90% of Global Gross Domestic Product and provides 80 percent of world trade. Before the triggering of the global financial crisis, “Group 20” held a meeting at the level of ministers of finance or heads of the (Governing) central banks. The Summit in Washington on November 15, 2008, was organized for the first time at the level of the heads of the G20 member states. The explanation of the call at this level lies in the exceptional importance of the issues addressed.

For the preparation of the Summit in Washington on the days of 8-9 of November 2008, in Sao Paulo - Brazil's “financial capital” - a meeting of the finance ministers and the heads of the G20 central banks was held. They suggested the adoption of measures on the issue of charged fees: to increase of the role of national institutions to combat financial crisis; to reform the international financial system, through “*Breton Woods II*”.

Major emerging economies, especially Brazil, Russia, India and China, came to the Summit prepared to obtain “*participation*” in international decision-making system “*according to their position in the global economy*”. It is known that – in recent years – China has been involved in African economies, *developing a new type of cooperation with African countries, based not only on the exploitation of their resources but also <on an effective support for the economic development of these states>*; Brazil has involved more in the economy of Latin American countries and India has expanded its economic relations with the Russian Federation. The European Union has brought to the Summit in Washington “*a strong message of profound reform of the international financial system*” by taking measures to oversee it. Russian Federation has expressed public

support for the European Union position on reforming the international financial system – through the statement of her President, Dmitri Medvedev<sup>18</sup>.

On November 15, 2008 – in Washington - several points of view were confronted, especially between the European Agenda, supported by Nicolas Sarkozy and the American Agenda, supported by President George W. Bush. If the European Union called for an effective involvement of national institutions, European and universal “in combating and preventing the global financial crisis”, President Bush stated that “*the United States does not want a too severe framing of their financial industry, whose contribution to Gross Domestic Product of U.S. is 10 percent*”<sup>19</sup>.

U.S. President refused the idea that the United States to bear the entire responsibility for the international financial crisis, but it was agreed for the G20 leaders “*to lay the ground for reforms to prevent repetition of such crises in future*”<sup>20</sup>. President Bush claimed that “*this crisis is not a failure of the free market economy, and the answer is not to reinvent the system*”<sup>21</sup>. However, the European Union, the Russian Federation, Brazil and China have decided to “*change the architecture of international finance*” through “*effective measures of regulation and supervision*”. After a preparatory meeting of the finance ministers and heads of G20 central banks – which took place in Sao Paulo, between November 8-9, 2008 – and after high level negotiations in Washington on November 15, 2008, some very important decisions have been adopted: a. effective support for economic through re - launching policies b. adoption of international standards to give an appropriate regulation of the financial system, c. performing a reform of international institutions such as to prevent similar crises in the future. The negotiations during the Summit have highlighted that “*negotiations of the details is difficult*” and that “*they should be continued until the next meeting to be held on 30 April 2009*”, when they reach 101 days in the U.S. Administration by Barrack Obama. Concern to find appropriate solutions to combat

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<sup>18</sup> Philip Stephens, „*Financial Times*”, October 9, 2008.

<sup>19</sup> Summit on the crisis in Washington, „*Adevărul internațional*” November 15, 2008.

<sup>20</sup> Ibidem, p.10.

<sup>21</sup> Ibidem.

global financial crisis concerns not only national and regional institutions but also the existing universal ones.

## **II. THE MAIN REQUIREMENTS OF MANAGEMENT TO COMBAT THE EFFECTS OF THE CRISIS AT THE REGIONAL AND NATIONAL LEVELS**

Beyond the divergent points of view - which did not miss during the G20 Summit in Washington, held on November 15, 2008 - a consensus on the involvement of national institutions, regional and universal in the complex process of combating the effects of financial crisis world came into shape.

Consensus on this option was outlined just before the Summit, by the measures adopted by the United States and the positions agreed – through negotiations – by the EU leaders, at the request of the President in exercise of the Union, Nicolas Sarkozy. It is known that – after the first negative vote of the House of Representatives for the “*Paulson Plan*” to support the banking system by 700 billion U.S. dollars, following the Lehman Brothers crash – following the positive vote of the Senate, the House of Representatives voted in favor, with 263 votes more than needed for the grant amount. After negotiations with Germany, Britain, Italy and Spain, the French Presidency has promoted the involvement of national institutions for “*supporting the banking system*”<sup>22</sup>.

The French President has managed to promote the view that “*in these troubled times, returning to the State, is a solution, even on a temporary basis*”<sup>23</sup>. Gordon Brown, Prime Minister of Great Britain, has initiated an action to “*support the banking system*”, and Angela Merkel - after having expressed some reservations - agreed to accept, eventually, “*involvement of national institutions in combating the effects of the crisis.*”

However, after the G20 Summit in Washington, the involvement of national institutions has continued to support the banking system. An example - commented extensively in international

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<sup>22</sup> Henry du Limbert, “*Sarkozy’s Economic Patriotism*”, *Le Figaro*, October 24, 2008.

<sup>23</sup> *Ibidem*.

banking circles - is the support of the U.S. Government of one of the most important banks: CITI GROUP. Under the circumstances where CITI GROUP actions have declined by 60 percent, in the week of November 17-23, 2008, the government announced that the U.S. *would intervene to guarantee bad mortgage loans and certain other assets belonging CITI GROUP, with the amount of 306 billion dollars.* The Government of the U.S.A. decided, however, an injection of 20 billion dollars cash from the U.S. Treasury, in addition to the 25 billion dollars, granted in the October “*program to save financial system*”, advanced by Henry Paulson, Secretary of State of the U.S. Government. In exchange for the financial aid – the CITI GROUP has to keep away from a possible bankruptcy – the U.S. Government will receive preference shares for 27 billion dollars.

During the debates – at Davos World Economic Forum – have been pointed out that one of the causes of the “*current crisis*” is the “*waste*”, consisting in bonuses of millions of dollars to bankers<sup>24</sup>. For example, Goldman Sachs, UBS, Lehman Brothers, Barclays and other banks – who are now in difficulty – have given substantial bonuses to their leadership, to those bankers who were considered to be “*a business performance management*”. Robert Diamond – Head of Commercial Division at Barclays – received in 2007, a bonus of 6.5 million pounds sterling in addition to basic annual salary of 250,000 pounds. Substantial bonuses were also received by other members of bank management teams, like managers from Goldman Sachs, UBS, Deutsche Bank etc...

This year, more and more banks have decided to give up bonuses and limit the payment of basic salaries of bankers that are still quite substantial. Waste disposal has been requested by Senators of the American to multinational managers who asked for substantial aid from the U.S. legislature. For example, the managers from “General Motors” have asked for a financial support of 60 billion dollars from the U.S. legislatures. After “having shown” that this is appropriate financial support, a U.S. Senator asked them on what kind of the plane they came to Washington, and when they replied that they came

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<sup>24</sup> Timothy Geithner, Statement at the World Economic Forum, Davos, January 27, 2011. At the Davos World Economic Forum have participated Executive General Directors of J.P. Morgan Chase, Bank of America, Deutschbank, Credit Agricole and City Group.

on personal aircraft, the Senator advised them to return home and sell the planes and other liabilities acquired for personal enrichment, thus avoiding the bankruptcy of their company.

**§ 1. European institutions - an increasingly important involvement in combating the global financial crisis**

Following the negotiations initiated by the French Presidency, the Member States of the Union, and also the European Commission have examined the possible and necessary measures to combat the global financial crisis. On November 26, 2008, the European Commission presented a “*plan for economic re-launching*” comprising of two central elements: a. tax incentives for short-term stimulation of the demand, jobs protection and regaining consumer confidence that they can afford to purchase the products they need b. The European Commission proposed – in the following period (years 2009-2011) – to put more emphasis on “**smart investments**” to determine economic growth. The President of the European Commission, José Manuel Durão Barroso, highlighted the need to “*adjust the national measures to those adopted at European level*”. According to the European Commission priority-, at least at this stage – will be given to “*punctual short term actions*”, aimed at, for example, subsidies for the automotive industry. The European Commission shares the opinion of some American industrialists who argue that one should act with more courage for *relocating the automobile industry to Eastern countries*<sup>25</sup>. The European Commission has proposed, at the same time, that Member States should follow the example of Great Britain on reducing value added tax. European Commission supports the view of Prime Minister Gordon Brown that such a reduction would be likely “*to support national economies*”. It is known that the minimum level of value added tax is 15 percent; however, 25 member states practice a percentage higher than the ceiling of 15 percent. Only 2 Member States: Cyprus and Luxembourg have a value added tax of 15 percent. Gordon Brown has proposed a reduction of value added tax from 17.5 to 15 percent by the end of 2009. The European Commission has proposed also to give a more sustained support to small and medium enterprises, which have proven to be largely exposed to the global

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<sup>25</sup> Jose Manuel Durao Barroso, Op.cit., loc.cit.

financial crisis. It is stressed that the European Investment Bank has engaged a “loan program of 30 billion Euros for small and medium enterprises”. The European Commission decided, at the same time, the reallocation of funds targeted – giving priority - to the vulnerable areas in the Union. Based on analysis, the European Commission found that appropriate measures are necessary to accelerate payments on projects for structural funds.

## **§ 2. The urgent reforms are needed**

The global financial crisis has led to concerns regarding the reform of global financial institutions as well. The Summit in Washington has proposed, among other things, a Breton Woods II, according to which measures are agreed to “*improve the international financial system architecture*”. U.S. President, George W. Bush, called for “*modernizing the International Monetary Fund and International Bank for Reconstruction and Development - World Bank*”<sup>26</sup>. Political leaders of several countries consider that the international financial reform should include “*supervisory methods*” where *all the institutions and markets, financial institutions, including offshore and rating agencies, should be attracted*. And on reforming the system of universal institutions, the European leaders – led by the French President, Nicolas Sarkozy – have advanced several proposals, including: a. the construction of a system of international finance where the European Union “*has a more important role*”, b. adopt a “*program of action to counteract the effects of the financial crisis*”, c. ensuring accountability and transparency for all participants in the functioning of the global financial system. More emerging powers, especially Brazil, Russian Federation, China and India insist to take an active part in the decision making of the development and promotion of the world financial system. Meanwhile, several countries in the Islamic world formed the D8 group - Islamic Economic International, insisting that the decisions which it takes to be considered at the level of universal economic mechanisms. Heads of state and government - meeting at the Winter Council in Brussels, December 11-12 , 2008 - had to resolve major problems for the economic development of the European Union not only for the new year 2009, which was close, but also for the next 4-5 years at least. Urgent – and equally expensive

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<sup>26</sup> George W. Bush, *Statement at the Summit in Washington*, November 15, 2008.

measures – had to be agreed to limit the effects of global financial crisis<sup>27</sup>, and also measures to counteract the climate change<sup>28</sup>.

### **§ 3. The effective measures are needed to limit the effects of the crisis**

The leaders of the European Union reached full consensus on the adoption of effective measures to limit the effects of global financial crisis<sup>29</sup>. The European Commission proposals<sup>30</sup> have received support, although both at the ECOFIN<sup>31</sup> meeting and during the debates prior to the European Summit in Brussels, certain reservations have been expressed<sup>32</sup>. Before the Summit in Brussels, France and Britain have called for a *"Plan as committed as possible to combat the global financial crisis"*, but Germany has been more cautious, considering that it is the main contributor to the Community budget<sup>33</sup>. The European leaders reunited in Brussels, on 11<sup>th</sup> -12<sup>th</sup> of December 2008, discussed the European Commission proposal on *"the economic re-launching plan of 200 billion Euro"*<sup>34</sup>. Heads of State and Government meeting in Brussels, had to consider ways of promoting the *"economic Plan"*, involving 1.5 percent of European gross domestic product, as they had to overcome Germany's repeated reserves. To prepare the Winter Summit in Brussels, of 11<sup>th</sup> -12<sup>th</sup> of December 2008, Prime Minister Gordon Brown, President Nicolas Sarkozy and President of the European Commission José Manuel

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<sup>27</sup> Jose Manuel Durao Barroso, *Op.cit.*, loc.cit.

<sup>28</sup> Vaclav Klaus, *Global Heating Has Become an Ideology, Adevărul internațional*, December 12, 2008.

<sup>29</sup> Jean Claude Trichet, President of the Central European Bank, stated that *"The global economy will probably remain weak in 2009 also and equally the demand of the EURO countries"* (Statement made on December 4 2008, in „Business International”, December 5, 2008, p.47).

<sup>30</sup> Jose Manuel Durao Barroso, *Op.cit.*, loc.cit.

<sup>31</sup> Council of the Ministers of Finance of the European Union.

<sup>32</sup> At the Council of the Ministers of Finance of the European Union (ECOFIN Council) meeting, that took place in Brussels, at the beginning of December 2008, the German minister of finance, Peer Steinbrueck, manifested reservations regarding the proposals in *„The Common Document"*, which did not specify *„ the concrete effort each country was supposed to make"*.

<sup>33</sup> Peer Steinbrueck stated at the ECOFIN meeting that anything above the 32 billion promised for combating the crisis Germany's effort would be too great.

<sup>34</sup> Re-launching Plan published by the European Commission November 26, 2008 (Jose Manuel Durao Barroso, *Op.cit.*, loc.cit.).

Durão Barroso, met on 8 December 2008 in London, in a MINISUMMIT, during which the three pronounced for *effective and coherent action at the Summit of 11<sup>th</sup> -12<sup>th</sup> of December in Brussels*<sup>35</sup>. Even from the first day of the Summit in Brussels<sup>36</sup>, compromising solutions were found, giving expression to European Union leaders will to address the issue of combating the financial crisis as “*a priority of all Member States*”<sup>37</sup>. After several meetings - at European<sup>38</sup> and worldwide<sup>39</sup> level - the EU has shown perseverance and determination to promote an agreement on measures to counteract climate change.

Legislative package designed to reduce carbon emissions by 20 percent over the next 12 years was voted unanimously by the representatives of the 27 European Union Member States<sup>40</sup>. Stavros Dimas, European Commissioner for Environment, said - after the unanimous vote of the Member States: “*If all the other countries follow the example of European Union Member States, then our planet is standing a chance*”<sup>41</sup>. On April 2, 2009, the leaders of industrialized countries and emerging economies had decided to act together, in order to limit the effects of the global financial crisis<sup>42</sup>. Barak Obama, the president of the United States, has proposed to reinforce the role of the International Monetary Found to be able to

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<sup>35</sup> Angela Merkel was – as the daily „Bild” noticed – the great absentee of the MINISUMMIT in London. However, the German Chancellor has made her position known before the Summit in Brussels on December 11-12, 2008. Her Excellency has stated that she would not agree with an “*Economic re-launching plan*” that would jeopardize jobs in the energy consuming industries in Germany. “*We cannot be indifferent while jobs in chemical, steel manufacturing industries are being created in the world where environmental legislation is less rigorous than here*” (Angela Merkel, *Statement made on December 8, 2008*, in the *Bild*).

<sup>36</sup> On December 11, 2008.

<sup>37</sup> Silvio Berlusconi, *Statement made in Brussels on December 11, 2008*.

<sup>38</sup> Stavros Dimas, European Environmental Commissioner stated, at the UN Conference on global heating in Poznan, in Poland, on December, 1, 2008: “*The Financial crisis has highlighted how dangerous is to ignore imminent warnings. We cannot afford to repeat this mistake in the case of climate changes if we want to avoid the serious economic, social, probably even catastrophic consequences they may have in the following decades*”.

<sup>39</sup> *UN Conference on climate changes*, Poznan, December, 1-12, 2008.

<sup>40</sup> At the Summit in Brussels, on December 11-12, 2008.

<sup>41</sup> Stavros Dimas, *Statement at the Summit in Brussels*, on December 12, 2008.

<sup>42</sup> The Summit of G20 in London, on April 2, 2009.

support effectively some countries in difficulty; Nicolas Sarkozy, the president of France, has suggested to find out better solutions in the field of international control on financial system; some leaders of emerging economies have proposed to be approved an important financial amount, in order to help developing countries<sup>43</sup>; and all leaders accepted the idea to facilitate the development of international trade<sup>44</sup>, as an important stimulant of the increased productivity in all sectors of the economy all over the World<sup>45</sup>.

## **II. THE MAIN REQUIREMENTS OF MANAGEMENT – IN THIS PERIOD OF TIME – IN CENTRAL AND SOUTH-EAST EUROPE**

We can see at national and international level some important measures taken on combating the effects of global financial crisis. The European Union has proved effective not only by the initiatives taken, but above all by the concrete measures taken to limit the effects of this crisis. There is a hope that – under the current circumstances – the financial crisis will be limited and even eliminated if all institutions at national<sup>46</sup>, European and international level would act effectively<sup>47</sup>. At the same time, we have to learn the conclusions of the World Economic Forum in Davos, at the beginning of this year<sup>48</sup>.

### **§ 1. Some important characteristics of the Central and South-East Europe**

As it is known, the Central and South-East Europe has – at least – the following characteristics: **a.** Many countries of this region have been – for more than forty years – under the influence of the Soviet bloc management; **b.** Part of these countries have abandoned

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<sup>43</sup> Ban Kee Moon, the Secretary General of the United Nations, has proposed 1000 billion dollars, as financial support for developing countries.

<sup>44</sup> Was an agreement to increase financial contributions of the states for the development of international trade.

<sup>45</sup> Some leaders of G20 – and in particular from Brazil and India – have underlined that in this way unemployment would be reduced and the economy would be recovered.

<sup>46</sup> The states, first of all.

<sup>47</sup> See the conclusions of the G20 Summit, in London, on April 2, 2009.

<sup>48</sup> See the debates of the World Economic Forum, Davos, January 26-30, 2011.

the old management through the 1989-1991 years revolutions; c. In this moment, the most Central and South-East European countries have become members of the European Union, and have adopted the free market economy management.

## **§ 2. The main requirements of management in the Central and South-East Europe**

In our view, the Management in Central and South-East Europe – in order to become more efficient – presupposes some urgent measures to be taken:

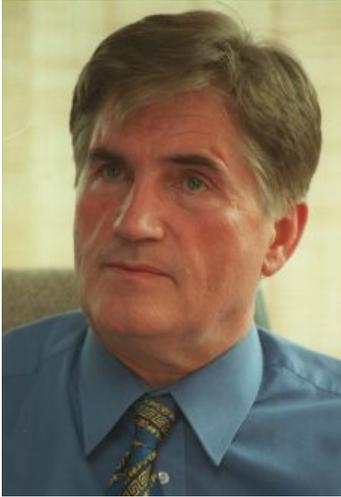
First of all, it is absolutely necessary to make a sincere evaluation of economic potential of each country from Central and South-East Europe.

Secondly, there is a priority to adopt the appropriate measures to promote efficiency in all sectors of economy. New technology is immediately needed.

Thirdly, from the experience in the past twenty years appeared to be necessary to keep all the potential components of the economy and, in particular, its natural resources in interior of each country, and to stop the tendency to transfer them abroad, under the control of multinational companies.

Fourthly, there is an urgent measure to prepare competent managers in all sectors of the economy, in order to have the necessary economic expertise and performance.

Fifthly, should be understood that only on the basis of cooperation between institutions in each country and the cooperation between the Central and South-East European countries it would be possible to manage in a better way the economy and the life of people in this region of Europe.



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President, European Centre Maribor  
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Member of the Collegium Observatory Magna Charta Universitatum  
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Member of the Steering Committee of the I.C.H.E. (International  
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Member of Paneuropean Union

Member and President of the Danube Rectors' Conference (1996-  
1999)

Member of the international committee European Forum Alpbach  
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Governor of the American Chamber of Commerce in Slovenia (1999-  
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Member of the board CRE-EUA (1998-2001)

President of the Conference of Independent Colleges in Slovenia  
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## **MANAGEMENT DEVELOPMENT IN CENTRAL AND EASTERN EUROPE WITH REGARD TO SLOVENIA**

### **Abstract**

*Numerous studies of modern management in transitional countries and Slovenia have been developed by foreign and local institutions and experts, particularly World Bank, EBRD, the European Union, universities, and others. mostly researches concluded that Slovenia has successfully completed the transition in organizational sense in public and business field. The question is what are the criteria?*

*Following the definition of management for further discussion it was necessary to analyze specific elements of management in transitional countries and in Slovenia as well.*

*Most common, the term "Management" is defined as the process of leading and directing - all or part - of an organization, often public or business, through the deployment and manipulation of resources (human, financial, material, intellectual or intangible). We have to analyze the process of leading and directing in public and in business management. For our discussion we have to analyze deployment and manipulation of human, financial, material, and intellectual resources.*

*For these purpose we specifically consider what are the actual effects of management successes in Slovenia in comparison with other countries in transition, and in parallel with the countries, older EU members as well. Research has been done in specific segments, such as strategic, human resources, communication, financial, crisis, and change management. Results of the analysis have not take in consideration different starting position of Slovenia compared to the other countries in transition.*

*In Europe, in theory and in practice, it is urgent need for a new understanding of leadership, linking goal setting, organization and coordination and control over the achievement of objectives from the point of view of Lisbon strategy. That urges for a new European leadership especially in the field of public administration management and in financial management as well.*

*Performance of the Management in the country is measured also by the criteria defined in the definition of the term management: how the management successfully set goals, organize and coordinate activities to achieve these goals, and oversee their realization.*

*Comprehensive analysis in accordance with uniform criteria to fully analyze the countries in transition and to objectively compare results in the management field have not yet been made. On the basis of partial analysis can be stated that various countries have been successful more or less.*

*Some of the analysis of domestic and foreign scientists and institutions who have analyzed the performance of management in Slovenia and in EU countries and made a comparison with other countries in transition have partially followed these three main criteria in various areas of management.*

### **Studies of modern management**

Numerous studies of modern management in transitional countries and Slovenia have been developed by foreign and local institutions and experts, particularly World Bank, EBRD, the European Union, universities, and others. mostly researches concluded that Slovenia has successfully completed the transition in organizational sense in public and business field.

The question is what are the criteria?

### **The Definition of Management**

Following the definition of management for further discussion it was necessary to analyze specific elements of management in transitional countries and in Slovenia as well.

Most common, the term “Management” is defined as the process of leading and directing - all or part - of an organization, often public or business, through the deployment and manipulation of resources (human, financial, material, intellectual or intangible). We have to analyze the process of leading and directing in public and in business management. For our discussion we have to analyze deployment and manipulation of human, financial, material, and intellectual resources.

### **The Results of the Analysis**

For these purpose we specifically consider what are the actual effects of management successes in Slovenia in comparison with other countries in transition, and in parallel with the countries, older EU members as well. Research has been done in specific segments, such as strategic, human resources, communication, financial, crisis, and change management. Results of the analysis have not take in consideration different starting position of Slovenia compared to the other countries in transition.

In Europe, in theory and in practice, it is urgent need for a new understanding of leadership, linking goal setting, organization and coordination and control over the achievement of objectives from the point of view of Lisbon strategy. That urges for a new European leadership especially in the field of public administration management and in financial management as well.

### **The Results of the Analysis II**

Performance of the Management in the country is measured also by the criteria defined in the definition of the term management: how the management successfully set goals, organize and coordinate activities to achieve these goals, and oversee their realization.

Comprehensive analysis in accordance with uniform criteria to fully analyze the countries in transition and to objectively compare results in the management field have not yet been made. On the basis of partial analysis can be stated that various countries have been successful more or less.

### **The Conclusion**

Some of the analysis of domestic and foreign scientists and institutions who have analyzed the performance of management in Slovenia and in EU countries and made a comparison with other countries in transition have partially followed these three main criteria in various areas of management.



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Momir Bulatovic was born September 21, 1956 in Belgrade, Serbia. In 1986, he earned a master's degree at the Faculty of Economics in Podgorica, Montenegro, and later on was awarded a doctoral degree at the European University in Belgrade, Serbia, in 2006.

Bulatovic served as President of the Republic of Montenegro between 1991 and 1998. He became Prime Minister of the Federal Republic of Yugoslavia in 1998 and remained in the office until 2000.

Due to the nature of the job he was doing for 12 years (the president of the republic and the prime minister of the federal government) he was deprived the possibility of publishing his works both in local and foreign magazines. Bulatovic has been an active participant in a number of international meetings, conferences and interstate visits; he has held numerous lectures abroad, and his views have been quoted and communicated in all leading international media.

As a part of his publishing activities, Bulatovic published five books that have come out in several editions and in large circulation.

## NEGOTIATING IN THE PROCESS OF ACCESSION TO THE EUROPEAN UNION

### Abstract

*Serbia and Montenegro are expected to start negotiations on their memberships with the European Union. The purpose of the negotiations is to establish the procedures that a candidate country must comply to join the European Union. The European integration process is comprehensive and, regardless to the current crisis and the loss of political and other confidence it appears to be objectively unstoppable. The speed of the negotiations depends on the level of preparedness of each individual candidate country and the complexity of issues that should be resolved. The analysis of the former negotiations on joining the EU offers useful insights. The expectations on the future negotiations on Serbia and Montenegro accession to the EU has also been considered, and they are used as a basis for consequent suggestions for creating optimal negotiating processes between Serbia, Montenegro and the European Union...*

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*In the process of European integration, the region of the Western Balkans is approaching the final, decisive phase. By gaining the status of a candidate for membership and fulfilling all accompany conditions, according to the procedure accepted by the European Commission and verified in all EU member countries, a date of starting negotiations on accession to the European Union will be set for each country in this region.*

*Every negotiation process is a complex and considerably disputable activity. The negotiations on accession are carried out by managers with a supreme level of responsibility and knowledge (the top government officials and experts for particular areas). The results of the negotiations and concluding the agreement (accepting general EU regulations) determine the near future of the country, the new EU member. Therefore it is necessary to secure the transparency of all phases of this very complex process. The transparency is required due to providing the high level of social cohesiveness (i.e. the greater degree of social conformity as possible), and the cohesiveness is the means to attain the essential goal. A country joins the European Union as whole, and not only the elite that have represented it in the*

*accession process. Consequently, it is necessary to create an environment where most people will view the success as their own and the negotiating problems as a challenge for providing personal contribution to overcome them. That is also the way to define the basic problem approach to negotiations in the process of accession to the EU.*

### **Process of the European Union Enlargement**

The European Union is one of the most successful integration projects of all times. It entered the new millennium as a community of fifteen countries with the strongest common market in the world (with the population of 350 million), common currency and the expressive political ambitions. One of them was the decision on enlargement that is on enabling the non member countries interested to gain the status of a member state who along with that, are ready to fulfill previously stated terms of accession.

The negotiations on starting the accession process began late in March 1998 with six countries candidates for the membership in the EU.<sup>49</sup> These negotiations started with: Hungary, Poland, Estonia, the Czech Republic, Slovenia and Cyprus. In the mid October the following year (1999), the European Commission recommended to start negotiations with: Romania, Slovakia, Latvia, Latvia, and Malta.

Early in October 2002 the European Commission recommended to close negotiations with Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Malta, Poland, Slovakia and Slovenia. The negotiations with all candidate countries (except for Romania) officially ended in December 2002.

The Republic of Croatia, FYR of Macedonia, Turkey and Montenegro have gained the candidate status, and Albania, Bosnia and Herzegovina and Serbia (with Kosovo being considered as a separate issue) are currently treated as having the status of potential candidates.

Regardless to the time length of the status that certain countries enjoy and the reality of fulfilling requirements for further phases of joining the EU, it is clear that the process of European integration is comprehensive and, disregarding the current crisis and

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<sup>49</sup> All data from the EU web site, Enlargement, Archives.

the lack of political and any other confidence, it appears to be objectively unstoppable.

### **Negotiations on Joining the European Union**

All members of the European Union are considered as partners in the negotiating process with candidate countries. The European Commission negotiates in the name of member countries (the Council of Ministers) on the basis of previously reconciled negotiating position. The candidate country determines its starting position regarding each of 31 chapters of EU acquis<sup>50</sup> (accumulated legislation, legal acts, court decisions which constitute the body of European Union law) after which the negotiations can start. The candidate for the membership then appoints a head of the negotiating team and a group of experts as supporting members.

The European Commission proposes the draft of the negotiating position. It is in permanent contact with the negotiating team of the candidate country with wish to find joint solutions to problems that may come up during the negotiations. Directorate of European Commission for enlargement is in charge of the coordination. The role of the European Parliament is very significant. It must be constantly informed on the course of the negotiations and provide its contribution to the conclusion of the contract on accession. The possibility that representatives of the citizens of all EU member countries convey their attitude regarding the particular decision on enlargement is offered in a debate on the ratification of the agreement on EU enlargement. The conclusion of the negotiations includes its ratification in parliaments of all EU member countries. In certain cases, particular countries may call on the referendum as a final means for confirmation of the accession agreement.

Procedures according to which the candidate country will join the EU are also established during the negotiations. They are focused on conditions under which the candidate will adopt, implement and enforce (acquis) the European law. Possible transitional agreements are separately concluded and they must be limited regarding the scope and the time length. This is justified if a candidate country considers

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<sup>50</sup> Precize laws and regulations adopted by the EU founding documets, mainly based on treaties concluded in Rome, Maastricht, Amsterdam and Nice (amended Oct. 30, 2010). Hereinafter referred to as 'EU Laws'.

that the sudden transition to the common European Union law and regulations (at least initially) will disrupt its existing economy structures or social relations. The course of the previous negotiations on EU membership, and also the previously concluded transitional arrangements, are used as arguments contributing this demands. This is the most important part of the negotiations for the candidate country, since it is provided an opportunity to present itself, explain and protect its specific interests ‘sacrificed’ in the name of the integration process.

The negotiating procedure was harmonized in the European Commission in 1997. In the essence, it includes sessions participated by ministers or permanent EU member states representatives, and ambassadors or heads of candidate countries negotiating teams. The negotiations with each candidate develop depending on their individual merits. The procedure also determines that the speed of all negotiations will depend on the degree of preparedness of each individual candidate and the complexity of the issues that should be resolved. Therefore it is not possible to envisage the length of the negotiating process in each individual case.

The negotiations are conducted on each individual chapter of the agreement. Results of all these negotiations are united in the accession agreement. The agreement is approved by the European Commission, and confirmed by the European Parliament. After signing, the document is submitted to ratification both in all member countries and the candidate country. By completing this procedure it comes into power and the candidate gains the status of a European Union member country.

### **Basic Characteristics of Former EU Enlargement Negotiations**

The big enlargement occurred late in 2002, when the status of a member state was gained by ten countries. Descriptively said, instead of EU-15, there came the EU-25. Later on Bulgaria and Romania have joined but in the purpose of this paper it is “the big enlargement” that is more valuable just because of the fact that the negotiating process was in progress simultaneously for such a large number of countries and with such substantial differences in their internal state positions.

The negotiations started only after the pre-accession strategy had been achieved. In brief, it included the following three steps: /1/

passing and ratifying the Stabilization and Association Agreement; /2/ Establishing partnership relations with Europe; /3/ Pre-accession aid; /4/ Co-funding through international financial organizations; /5/ Participation in EU programs, commissions and agencies; /6/ Working out national program (strategy) for adopting European Laws; /7/ Reporting on progress; and /8/ the Permanent political dialogue.

The report on these negotiations provides an interesting analytical base.<sup>51</sup> First, it is noted that the negotiations with the candidate countries have started at different times, and ended with all of them at the same time. That certainly does not tell much about the course and the quality of the completed negotiations. Most of all it indicates to the existence of exceptional political will to perform the enlargement for relatively short time, independent from the difficulties that accompany the negotiating process. This factor should be particularly emphasized since there have been frequent claims in the European public regarding the tiredness of enlarging the EU.

Technically viewed, the European Commission has negotiated on each chapter of the European Laws with ten candidate countries individually. It means 310 parallel negotiations in total, which demands an exceptional administrative capacity from the parties participating in the negotiations. Especially, when having in mind that the stand towards exceptionally precise and detailed European regulations contained in its statutory directives is being established. Out of 31 chapters, there are 16 that the candidate countries obliged to obey immediately after signing all of the received relevant directives and without any adjustments to their realities. The more thorough insight into these chapters explains why it has been not only possible but necessary and logical. Namely, it is about chapters in which separate arrangements are simply impossible, since they specify general, civilization processes and values which implementation has been secured by the previous steps, before beginning the negotiations. It is about, for example, External Relations (Chapter 26); Foreign, security and defense policy (Chapter 27); Financial control (Chapter 28); or Institutions (Chapter 30). The same also referred to Enterprise and industrial policy (Chapter 16); Science and research (Chapter 17);

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<sup>51</sup> Report on the results of the negotiation on the accession of Cyprus, Malta, Hungary, Poland, the Republic of Slovakia, Latvia, Estonia, Lithuania, the Czech Republic and Slovenia to the European Union, prepared by the Commission's departments, Enlargement, EU.

and Education and culture (Chapter 29). Certain chapters resulted as a compromise achieved on the basis of the established principles and harmonized policy between the member and the candidate states (Chapter 29 – Financial and budgetary provisions); or Regional policy and coordination of structural instruments (Chapter 21) where the regions of the candidate countries are treated in an equal manner in their aspiration to using EU funds.

These two stated chapters are just an introduction into the very essence of negotiations on accession to the European Union. In them it is necessary, in a manner that is in accordance with the European regulations (laws), and by using the harmonized instruments (statistics and other institutional frameworks) at the EU level, to explain and defend some special interest and provide time and conditions for the necessary adjustments. If it shows as successful, the candidate concludes a separate transitional arrangement with the EU, which specifies the precise and clear measures it will carry on applying, although opposing the EU common legal regulations, and also the time after which it will switch to complete respect of the EU regulations and laws.

There have been 335 such adjustments in this negotiating process. They referred to 74 regions within 15 chapters of the negotiations.

Most of these special agreements have been related to Agriculture and rural development (Chapter 7). There have been 118 adjustments carried out within 27 separate areas of agriculture. The second place takes the Environment (Chapter 22), with 48 separate agreements within seven areas of this chapter. After that follows the Taxation (Chapter 10), with 31 adjustments within three areas. The fourth place takes the Competition policy (Chapter 6), with 29 separate agreements in six areas. Transport policy (Chapter 9) comes as the fifth with 28 adjustments and nine separate transportation areas. The Right of establishment and freedom to provide services (Chapter 3) comes next with 16 adjustments in 4 areas, and the Energy (Chapter 14) with 15 separate agreements in five areas of this sector. The eighth place, according to the adjustments, is taken by the Free movement of capital (Chapter 4), with 13 adjustments in three areas. Other areas include the Company law (Chapter 5), with ten special agreements and the Fisheries (Chapter 8) with nine adaptations. Each adjustment has been accompanied with precisely defined and taken obligation

regarding its duration. The agreed period of adjustment depends, above all, on the very nature of the process. Precisely, it ranges between three years (as minimum), over five years (the usual agreed time) up to 13 years in the case of individual structural adaptations.

It has been necessary, without providing further details, to burden this text with double statistics, since the same candidate country could conclude the adjustments agreements within particular area of the same chapter, i.e. to get more specific adjustments in the area of agriculture or transportation. These data have been presented in order to get an insight into the level of specific problems that are the subject of negotiating. On one side of the negotiating goal is the achievement of the European legal framework, covering the then 25 countries, and on the other end is the protection of specific interests of one industry or separate region of one of the member countries.

### **Particularities of Negotiating Process for Accession to the EU**

Negotiating is a normal activity of people as social beings. It involves activities by which the individual interests and behavior can be accomplished with the respect to similar interests of other people with whom he or she is in contact. In that way, for example, the etiquette, negotiated way of decent communication that should be respected by all, so that everybody feels equally well. Negotiating is the main part of any trade. Some cultures particularly insist on bargaining – as a kind of respecting the role of the other side in fulfilling one's own needs. In brief, there is hardly an individual who does not use this or that kind of negotiating several times, even during one day.

It is common to approach negotiations according to the purely theoretical model of “Win/win” (negotiation philosophy).<sup>52</sup> It means that sides participating in it try to maximize the total outcomes of the negotiations in a way that, besides their own, they will respect the achievement of interests of the other participants as well. Other options are known in practice, i.e. negotiating philosophies. The “win/lose” combination means that the gain for one is founded on the loss suffered by the other. The “winner takes it all” principle sounds

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<sup>52</sup> This approach supposes that all participants are winning. The sides participating in negotiations give up some less important things to gain others for which they believe to be of more and longer importance.

particularly rude and unfair. Despite that, it is rather often applied in negotiating practice. Nevertheless, after all it has nothing to do with negotiating, since it is about a stipulation or some form of capitulation. However, it is necessary to be taken her into consideration because it is always reached after formally carried out negotiations, and its results are interpret as an agreement between the two equal and freely expressed wills.

Negotiations are essentially determined by three elements: /A/ negotiating parties – participants; /B/ goals – motives for negotiations, and /C/ procedures – rules of the negotiating process. The ideal model would be if the participants in the negotiations are of the equal level of power, when they have complementary objectives, and when the negotiation procedures are simple and being accepted for a long time. In that case the negotiations, as people used to say, will proceed in “the song and joy”. Of course, the more important the negotiations are for both sides, the conditions faster move away from those ideal, which means that the very process is becoming more complex and demands more effort and time.

Negotiating is mainly regarded as a skill<sup>53</sup>, and less as an area of knowledge based on experience. It is quite understandable. Namely, very few people deal with real negotiations, regarding any issue, or level that they should be carried out. The success of each negotiating process is inversely proportional to the number of participants. It means that the negotiations with most chances to be completely and quickly completed are those carried “face to face” (in confidence). Negotiators, moreover, are reluctant to admit their weaknesses and hidden trade-offs they were forced or willing to give. As a rule, they only emphasize what they consider to be received from the other side. So they (sometimes even unconsciously) cast a false picture of the negotiating process so that it becomes useless from the standpoint of experience that should be transformed into knowledge.

Peace talks are the most difficult type of negotiations. In principle, they are carried out between the warring parties, with tremendous pressures due to the loss of life and material destruction, with the international mediation of powerful countries which is

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<sup>53</sup> A search engine on the Internet serves best to confirm this claim. The best referrences of this term refer to the issues related to the negotiating techniques, crash courses and principles that sound nicely, although they have no operational value. See: The eight-stage negotiation process, [changingminds.org](http://changingminds.org).

usually unfair – but favor one side in the conflict, with constant pressure of the public and constant race with time.<sup>54</sup>

Negotiations on the accession to the European Union lack that level of dramatic nature and urgency. The public pressure is much smaller, and the external environment is more acceptable. However, they could not possibly be argued to be less difficult and of less importance. The specific features of these negotiations are determined by the reality of the following facts: Inequality between the parties: on one side, there is a community that represents the outcome of the most successful integration, composed of wealthy and powerful countries accustomed to negotiating. The applicant has none of these potentials. Inconsistent motives: the candidate country considers the success of the negotiations as reaching the supreme political and national objective. For the EU, it is just another member country, and requires new procedures of decision making resulting from that. Negotiating rules: determined by one side only – the European Union. Since the already known rules and procedures are being applied here, which the other side has accepted, makes this process unique in relation to classic negotiations. The limits set by the EU are being considered and met even before the negotiations begin. The European Commission monitors each previous phase and according to its estimation (which is always descriptive and could be arbitrary interpreted) determines whether the conditions for starting the negotiations are established. On the other hand, the very framework of the negotiation process (*acquis*) is constant. In that way the essence of this process can be better described as “negotiations on the implementation of the European law” than “negotiations on accession to the European Union.”

### **Expectations Regarding Future Negotiations on Serbia and Montenegro Accession to the EU**

Although there are certain differences between Serbia and Montenegro positions in the process of accession to the European Union, the similarities prevail. What is different is the current formal

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<sup>54</sup>The author of this paper has had an opportunity to personally participate in all negotiations that followed the clashes resulted from the break-up of former Yugoslavia. He has been doing this from the highest positions (as the head of the state and the prime minister) and meeting presidents of most important world countries and international organizations. Therefore, he considers these claims to have a necessary credibility.

status. Montenegro has gained the candidate status, but without the date being set for starting the negotiations. Before starting, it must make progress in numerous areas, (“seven chapters“). Serbia is regarded as a candidate country and hopes for the progress which includes setting the date of beginning the accession negotiations. What is common to both of them is not only the fact that until recently they have shared the same country and the position in relation to the EU, but also that they belong to the same European region, as well as a series of internal limitations they realistically encounter. Some of the most important are:

- the economy structure which is the result of several-year sanctions imposed against them by the so called international community (headed by the EU);

- the privatization which has been carried out in a manner that caused more problems than it could resolve, and questioned the survival of entire economy sectors and production branches;

- the latent political instability, i.e. a large number of disputes on politically important issues resolved by mild and current majority;

- the low level of administrative capacities in general and particularly in different administrative levels. It means that the leading positions in the state and public authorities are taken by individuals with a lack knowledge (and sometimes even without the basic motives to gain it) on European integration processes, their courses and importance in relation to the specific living and working activities. However, on the lower levels, among younger and educated people, there is willingness to learn and apply the knowledge of others. Nevertheless, they are not involved in the decision-making processes. The decision-makers do neither understand problems, nor have the will to accept the suggestions of those who know but lack the opportunity to decide. This problem is significantly noticeable in all areas of doing business and public life in general. In other words, there is hardly any decision made without previously established hardware of software flows of information required for the process of decision making. In such conditions it is rather sad than funny listening to executives and various bosses saying, “Only buttons on my mobile phone I know how to use are the red one and the green one;”

- the low salary policy for public servants: results in the fact that the best young personnel members, those who could be crucial

contributors to the negotiations success, have no wish to work in public administration, because there is no even the basic stimulus for such a decision;

- the low level of operative knowledge on the European Union and its institutions, policies and practice: maintains for intolerably long time. Significant amounts of the EU funds are being wasted and most often in a completely wrong way. Namely, most of it is being paid to foreign lecturers, after whose lectures there are more perplexities left than answers to specific dilemmas. The same pattern of behavior is applied by the specialized state officials. As if they are afraid that the increase of knowledge with others will decrease their significance and fringe benefits,<sup>55</sup>

- the irregular distribution of knowledge; as a serious hurdle to future negotiations. Namely, those who expect to be chosen as negotiators, lack the required specialist knowledge in the areas that will be negotiated. Those who have such knowledge are either kept at a distance from the negotiating process (at least as a support), or have no knowledge about the form it should be presented in negotiations. A simple truth, which is otherwise, very difficult to reach in this area can be explained as the following, “About what the interest of the negotiations is – ask the expert. About how that interest should be presented – ask a diplomat with negotiating experience.” This is a disturbing area which can be relatively quickly resolved, with the least effort but with highly expected favorable consequences. What is needed is the formation of teams by chapters of the negotiations and the time for preparing for them.

### **Conclusion – Suggestions for Optimizing Serbia and Montenegro Negotiating Processes**

The governments of Serbia and Montenegro must critically reconsider their economic and general position from which they start negotiations on membership with the EU<sup>56</sup>. It is especially necessary

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<sup>55</sup> The author of this paper has had an opportunity, at several meetings dedicated to promotion of the European integration and dissemination of knowledge about the IPA (pre-accession funds) of the EU, to listen to lectures given by incomprehensible officials from Brussels, and dissatisfied comments by the participants who have constantly sought for clarification of the issues, and not for unnecessary complication.

<sup>56</sup> Late in 2010, the European Commission amended Chapters of the *Acquis*. The aim was to consider new actual developments related to current and expected negotiations on the

to have in mind: /1/ actual effects of the implementation of the Stabilization and Association Agreement; /2/ the influence of the world economic crisis and /3/ measures that the EU has taken aimed at eliminating its consequences. This actual new framework must be perceived with the aid of the widest expert and scientific public. In that manner a social consensus should be reached on national interests that will be protected in the negotiating process.

Negotiating teams should be formed even before setting the date for starting the negotiations. They must include representatives both of the ruling parties and the opposition, while the main prerequisite must be a high degree of expertise and gained negotiating experience. The teams should have good preparations before the start of negotiations. A stimulating system must be created to attract the best trained (young) people to give their full personal contribution to the process.

It seems necessary to initiate a public discussion on the topic – membership in the EU. Governments must not spread the illusion that all actual economic problems will be resolved by joining the EU. Experiences of other countries show that by gaining the membership itself, essentially, nothing immediately changes for the better. The truth is that it just creates favorable conditions to ensure the efficient development and solving the accumulated internal problems. And in doing so it is always a crucial role of the one who has problems.

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accession to the EU. There are now 35 chapters, however the very essence of the previous 31 chapters related to negotiations remained unchanged.



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Most of his works are indexed in *Social Sciences Citation Index*, *Bibliographia Humboldtiana*, *Sociological Abstracts*, *Philosopher's Index*, *ECON RePec*, *SSRN*, *Thompson-Reuters*.

## **EURO CRISIS AND ITS CONSEQUENCES**

**Prof. Dr. Miroslav Prokopijevic**

### **CAN EURO SURVIVE?**

***Summary:** It is argued the current euro zone crisis is neither new nor surprising. Fiscal discipline in the euro zone was weak from its creation in 1999, but ongoing economic prosperity limited the damage. Economic recession deepened the impact of crisis on public finance and pushed some euro zone countries to the edge of bankruptcy. Options available to individual countries are costly and painful: foreign bailouts, cuts to expenditures, higher revenues, bankruptcy and some combination of the four. They may be conducted both inside and outside the euro zone. In order to get out of troubles, the euro zone as a whole needs to answer three problems. First, who is going to pay debts of countries in trouble? Second, how to keep fiscal discipline in the euro zone in a credible way? Third, how to regain competitiveness in the troubled euro zone countries? For now, the euro zone buys time with temporary assistance rather than it looks upon sustainable solutions including the recent “A pact for the euro”. If euro zone problems are not solved, financial markets may turn down the euro as a currency, possibly marking the beginning of euro-disintegration.*

*Key words: euro zone, euro, fiscal discipline, reform of public finance, bailouts, default, bankruptcy.*

JEL: G01, P16, P51.

In February 2010, the press in Europe and the United States was literally plagued with articles on the crisis of the euro. The threat emerged from some countries' high indebtedness and doubts of their ability to service debt, what again may undermine the euro. At the spot market the currency fell against its main rivals. The media promptly coined the acronym PIIGS, to designate main troublemakers in the euro zone - Portugal, Italy, Ireland, Greece and Spain. A sudden

rise in the number of articles related to the crisis of euro gives an impression the problems are surprising and recent.<sup>57</sup> As I have explained elsewhere, the crisis was neither surprising nor recent.<sup>58</sup>

Problems with euro stability existed from the beginning, i.e. from its inception. Poor fiscal policy in some euro zone countries, along with the European Central Bank's (ECB) and European Union (EU) authorities' inability to discipline members in the zone - such as either keeping the rules or enforcing fines for violations - contributed to such stability problems.<sup>59</sup> During prosperous years (1999-2008), fiscal escalation in the euro zone was moderate to excessive. The economic recession of 2008-2010 undermined public finances, while governments have not adjusted public spending to reduced financial potential. Public finance troubles escalated in nearly all euro countries, while the stigma fell on the PIIGS only. The PIIGS are probably in the inferior position now, but they are not the only euro zone members with troubled public finances.

### **1. Irregularities During Crisis**

Economic crisis arrived in Europe in August 2008 and changed the economic and fiscal picture. Sharp decline in economic activity undermined public finances. All euro zone countries exceeded the budgetary limit of -3% by far in 2009-10 (see Table 1). Finland was the only country expected to be below the budgetary limit in 2009, while no country is expected to obey the rule in 2010.

Table 1 General Government Balance in the Euro zone Countries, in % of GDP

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<sup>57</sup> It may be problematic for some authors to explain what happens now in the European Monetary Union (EMU), because the mainstream in the field - for example, Desmond Dinan (2003), Ali M. El-Agraa (2007) - ignored early troubles in the euro zone and behaved basically completely uncritical in presentation and discussion of the EU policies. Neglecting previous troubles, it is difficult to say what is going on now.

<sup>58</sup> Cf. Prokopijevic 2010.

<sup>59</sup> What happens now in the euro zone is not surprising to authors that spoke about euro troubles before, cf. Neil Nugent (2003), Miroslav Prokopijevic (2005, 2009).

*Management Development in Central and South East Europe*

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Country	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Euro	-1,4	0,0	-1,9	-2,6	-3,1	-2,9	-2,5	-1,3	-0,6	-2,0	-6,3	-6,6
Austria	-2,3	-1,7	0,0	-0,7	-1,4	-4,4	-1,6	-1,6	-0,6	-0,4	-3,4	-5,6
Belgium	-0,6	0,0	0,4	-0,1	-0,1	-0,3	-2,7	0,3	-0,2	-1,2	-6,0	-6,3
Cyprus	-4,3	-2,3	-2,2	-4,4	-6,5	-4,1	-2,4	-1,2	3,4	0,9	-6,1	-6,3
Finland	1,6	6,9	5,0	4,1	2,6	2,4	2,8	4,0	5,2	4,5	-2,2	-4,2
France	-1,8	-1,5	-1,5	-3,1	-4,1	-3,6	-2,9	-2,3	-2,7	-3,4	-7,5	-7,1
Germany	-1,5	1,3	-2,8	-3,7	-4,0	-3,8	-3,3	-1,6	0,2	0,0	-3,3	-4,6
Greece	-	-3,7	-4,5	-4,8	-5,6	-7,5	-5,2	-2,9	-3,7	-7,7	-	-7,1
Ireland	2,7	4,8	0,9	-0,4	0,4	1,4	1,7	3,0	0,3	-7,2	-	-
Italy	-1,7	-0,8	-3,1	-2,9	-3,5	-3,5	-4,3	-3,3	-1,5	-2,7	-5,3	-5,6
Luxembourg	3,4	6,0	6,1	2,1	0,5	-1,1	0,0	1,3	3,7	2,5	-0,7	-4,4
Malta	-7,7	-6,2	-6,4	-5,5	-9,9	-4,7	-2,9	-2,6	-2,2	-4,7	-3,8	-4,4
Holland	0,4	2,0	-0,2	-2,1	-3,1	-1,7	-0,3	0,5	0,2	0,7	-5,3	-5,7
Portugal	-2,8	-2,9	-4,3	-2,8	-2,9	-3,4	-6,1	-3,9	-2,6	-2,7	-9,4	-7,3
Slovakia	-7,4	-	-6,5	-8,2	-2,8	-2,4	-2,8	-3,5	-1,9	-2,3	-6,8	-4,4
Slovenia	-3,0	-3,7	-4,0	-2,5	-2,7	-2,2	-1,4	-1,3	0,0	-1,8	-5,5	-5,6
Spain	-1,4	-1,0	-0,6	-0,5	-0,2	-0,3	1,0	2,0	1,9	-4,1	-	-

Source: Eurostat (1999-2008)<sup>60</sup>; For 2009 *cf.* Eurostat (2010)<sup>61</sup>;  
Forecast for 2010, see International Monetary Fund (2009), p. 17.

If it is clear the -4,5% fall in euro area GDP in 2009 may justify a budgetary deficit of -6,3%, how it is to justify an expected 2010 deficit of -6,6%, if the expected fall in GDP is only -0,1%? The rule is that a fall of GDP for more than -2% justifies a deficit surpassing -3%. There may be several reasons for this inelasticity of deficits. First, countries have not adjusted their current expenditures - like salaries, pensions, transfers and public procurements - to lower revenues. Second, due to a rise in layoffs, more people get unemployment compensation and this expenditure is higher. Third, the fiscal stimulus in the euro area in 2009 and 2010 is estimated to be at least 2% of GDP per year. Fourth, governments have issued

<sup>60</sup> Eurostat. 1999-2008. Public balance. <http://epp.eurostat.ec.europa.eu> (accessed on March 1, 2010).

<sup>61</sup> Eurostat. 2010. News release, 55/2010.

[http://ec.europa.eu/portugal/pdf/imprensa/indicadores\\_estatisticas\\_2010/20100422\\_55\\_eurostat\\_en.pdf](http://ec.europa.eu/portugal/pdf/imprensa/indicadores_estatisticas_2010/20100422_55_eurostat_en.pdf) (accessed on April 22, 2010).

guarantees for different types of commercial activities in the private sector. Fifth, rising risks in debt service enlarged risk spreads, making debt service and borrowing more costly for a majority of euro area countries. Finally, a combination of these factors may also explain the deficit inelasticity.

Poor economic performance and an inability to adjust public finances to the situation lead to a sharp deterioration in public finances in the euro zone countries. The European Commission expects in 2010 all euro zone countries to exceed the debt limit of 60% (except for Finland, Slovakia and Slovenia).<sup>62</sup> A very rapid rise in public debt of euro zone countries is worrying. At the end of 2008, public debt for the whole zone was 69,3% of GDP and rose in 2009:Q1 to 72,7%, in Q2 to 75,9%, and in Q3 to 77,6%.<sup>63</sup> Public debt of the euro zone for 2009 reached 78,7%.<sup>64</sup> With an average rise per quarter of 2,7 percentage points in 2009, public debt in the euro zone will exceed 84% in 2010 by far (the forecasted figure of the EC and non market funds like the IMF and the World Bank). The figure is already terrifying enough, saying nothing of the larger.

Some countries of the euro area may face a vicious circle of higher debt and higher interest rates. This will be fostered by two factors. First, investors will progressively abandon risky bonds of some states; to induce demand, such countries must offer higher interest rates. The more countries enter “risky” territory, the more intense competition among them will be, driving interest rates to dangerous heights. Second, reference interest rates are now lower due to the policies of the ECB, the U.S. Federal Reserve (FED) and other large central banks that kept them low<sup>65</sup> during the crisis. In some periods, they even were negative in the real terms. When economic

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<sup>62</sup> European Commission (2009), p. 44.

<sup>63</sup> European Central Bank. 2009. Quarterly debt and change in debt. <http://sdw.ecb.europa.eu/reports.do?node=100000318> (accessed March 7, 2010).

<sup>64</sup> Eurostat. 2010. News release 55, April 22, 2010. <http://epp.eurostat.ec.europa.eu> (accessed April 25, 2010).

<sup>65</sup> ECB settled rates as follows: deposit facility at 0,25%, main refinancing operation at 1,00% and marginal lending facility at 1,75% for more than for an year. This solution prevailed at the beginning of March 2010. Inflation rate of the euro zone rose from -0,3% in September 2009, to 1,0% in January 2010 and 2,4% in February 2011, and this development may indicate rising interest rates may happen soon. Cf. Eurostat. 2010. News release 58/2010, April 30. <http://epp.eurostat.ec.europa.eu> (accessed May 2, 2010 and March 10, 2011).

recovery begins one day, inflationary pressures will rise and central banks (including the ECB) will be forced to raise interest rates, making both doing business and servicing debt more expensive. Under such conditions, some heavily indebted euro area countries will face additional difficulties and eventually they may default.

Before considering how to fix the rising debt and deficit problems in the euro zone, let us briefly elaborate the question, is inflation a good option. It would mean to pursue policies that boost prices and wages and erode value of the currency, while keeping interest rates low. There are several reasons why inflation is not a solution. First, inflation may initially reduce a small part of debt. However, the debt burden would remain and the negative effects of inflation could create a whole set of new problems. Second, inflation would make future debt service more expensive, because inflation tends to push up interest rates. Markets are going to charge higher interest rates. Third, some countries circulate inflation protected securities, with maturities of 5 to 20 years. Higher inflation would mean costlier debt service. In summary, higher inflation undermines price stability, reduces economic growth, increases social and political stress and adds strain on all, especially the poor. For these reasons inflation is not solution for the euro zone. I will firstly discuss options for individual countries in trouble. Thereafter I address the question what the euro zone as a whole needs to do in order to avoid a fatal outcome.

## **2. How to fix the problems in troubled economies**

Several initiatives may help heavily indebted countries ease their financial problems:

- External bail outs;
- Expenditure cuts;
- Revenue increases; or
- Economic recovery.

Some combination may also help, but none are easily accessible or available at low cost. Options mentioned above assume the country in trouble remains in the euro zone. There is also another option, leaving the euro zone for some time. Let us consider them in order.

Bail outs are motivated in at least two ways. First, the crisis in one euro zone country affects the whole zone via loss of credibility

and the common currency devaluation. Second, debt of the state facing default is spread in commercial banks throughout the euro zone. For example, if German banks hold € 28bn of Greek debt, the choice of the German government is either to help Greece now or to help German banks later on. Despite, bail out is a very limited option and is not easily negotiable among the euro partners. One may imagine a bail out in the case of one smaller country like Greece or Portugal, but such an operation in the case of PIIGS is impossible. The PIIGS, with Belgium and eventually some other country in the queue, is too big for such a rescue operation. It is even questionable whether Spain's bail out is feasible having in mind the size of its economy and its debt.<sup>66</sup> Bail out has some consequences both for country in question and euro zone (ECB). First, by helping to one country, other PIIGS will neglect domestic reform and rely on foreign assistance. Second, bail out costs countries providing help by worsening their budgetary positions. If they are already under -3,0% of budgetary deficit, this adversely affects both its and the position of the euro zone. Third, bail out spreads the message weak financial discipline pays off, because others will cover the costs, while domestic politicians and interest groups accrue the benefits. Fourth, this option is not easy to sell in countries providing assistance, because tax payers may turn against their government for helping another country whose government heavily misbehaved<sup>67</sup> in the past. Fifth, other countries may not be ready to provide financial assistance to a country in question until the country conducts some reforms to improve its growth and fiscal position. The credibility for such a reform move is low, as we will see soon. Bail out has also negative consequences for the euro zone and ECB. The credibility of the ECB has been shattered, because they gave in the first time pressure came. Purchases of nearly worthless bonds by the ECB raise doubts about central bank's

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<sup>66</sup> Spanish debt is € 950bn, i.e., 91% of its GDP.

<sup>67</sup> For example, the Greek government cheated the ECB and the whole world 2001-2005 by depicting budgetary deficits in the range -1,0% and -2,0%, while EU inspection found out it moved -5,0% and -8,0%. In 2009 the Greece conservative government repeated the mistake by declaring budgetary deficit to be around -7,0%, while it turned out to be -12,7% after first and -13,6% after the second revision. When the Greek debt crisis was in focus, the New York Times reported Goldman Sachs helped the country to get money in exchange for selling rights on revenues on airport and lottery until 2019. Cf. New York Times (2010).

independence from politics. The main duty of the ECB is to keep price stability. Purchases of worthless bonds are not in the description of the ECB operation. To the EU and its bodies is not allowed to cumulate a non-allocated debt, and that rule is now violated. The purchases rise stoking inflation by pumping new money into an economy and rise encouraging fiscal recklessness with the perception of a backstop. In summary, a bail out is an option when the economy in question is rather small, yet it is accompanied by a number of negative consequences.<sup>68</sup>

Another opportunity to address difficulties in the euro zone countries is cutting costs to improve budget positions. The reasons for this are discussed above. The EU expects Spain to continue with a deficit surpassing -12% in 2010, so cuts in this case do not look likely in the medium term. Greece promised to cut its budgetary deficit from -12,7% in 2009<sup>69</sup> to 2,0% in 2013. Such a drastic fiscal improvement has never happened in a developed country in Europe. Table 2 presents more details on Greek fiscal woes.

Table 2 Greek Public Borrowing Needs, € bn

	2009	2010	2011	2012	2013
GDP (2009 revised)	240,1	239,4	243,0	247,6	253,8
GDP growth	-1,2%	-0,3%	1,5%	1,9%	2,5%
Government deficit	30,5	21,2	14,2	7,2	5,6
Government deficit as % of GDP	-12,7%	-8,7%	-5,6%	-2,8%	-2,0%
Debt maturities		30,2	30,3	31,8	24,8
Gross borrowing needs		53,2	44,6	39,0	30,4
YTD debt issuance		8,0			
Remaining gross borrowing needs		45,2	44,6	39,0	30,4

Source: Greek Ministry of Finance (2010)<sup>70</sup>.

<sup>68</sup> Euro zone arranged a financial assistance for Greece of € 110bn in March 2010, and for other troubled countries of € 750bn in April 2010. The assistance should last for next three years. It buys some time provided the euro zone is able to redefine and enforce the rules, what is again unlikely. Otherwise, it will postpone financial troubles and countries' bankruptcies. Current Greek public debt is 118% of GDP, and in three years it will be at minimum 150%. To everybody is clear that this level is not servicable for Greece, without restructuring the debt.

<sup>69</sup> Eurostat corrected the figure to 13,6% with possibility for a further correction of up 0,3-0,5 percentage points. Cf. Eurostat. 2010. GDP, government deficit and debt in the EU. <http://epp.eurostat.ec.europa.eu> (accessed April 22, 2010).

<sup>70</sup> Greek Ministry of Finance. 2010. Greek Public Borrowing Needs. <http://www.mnec.gr/en/> (accessed January 10, 2010).

Now, if a country fails to act when its budgetary problems are growing and general economic conditions are more favorable, is it likely to behave better when economic troubles are larger and when a bail out is conditioned upon broader fiscal improvement? If a country internationalizes its problem, it creates the expectation others will solve its problem. This eradicates inclination for deeper reform inside the country. Since something should be done inside the country, half hearted reform may be the best case result. Greece demonstrates this after getting financial assistance in March 2010. Eventual sharper austerity measures may induce social unrest and enlarge political troubles.

If cutting expenditures is not an option, higher revenues may improve the fiscal position of a country in difficulty. This basically means higher taxes. Customs are abolished internally and fixed externally due to the EU customs union, excise duties are partially harmonized; what remains from larger sources of public revenues are the Value Added Tax (VAT), individual income tax and corporate profit tax. These sources are responsible for more than 75% of revenues in the EU15. The PIIGS have some room for a higher VAT, because the VAT rates were in April 2010 in Portugal and Italy 20%, Ireland 21%, Greece 19% and Spain 16%. The highest VAT rate in the EU27 is 25% and its height is not limited. However, higher VAT rates undermine economic activity and induce higher inflation. Concerning individual and corporate income tax<sup>71</sup>, less room exists because they are already high in the PIIGS. Higher taxes generally reduce economic activity, currently stagnant even without higher taxes (illustrated in Table 3).

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<sup>71</sup> Taxation and Customs Union – European Commission. 2010. Electronic Databases. [http://ec.europa.eu/taxation\\_customs/common/databases/index\\_en.htm](http://ec.europa.eu/taxation_customs/common/databases/index_en.htm)

Table 3 Growth Rates in the Euro Area

Country	2006	2007	2008	2009	2010
Euro area	2,9	2,7	0,7	-4,2	0,3
Austria	3,5	3,5	2,0	-3,8	0,3
Belgium	3,0	2,8	1,0	-3,2	0,0
Cyprus	4,1	4,4	3,6	-0,5	0,8
Finland	4,9	4,2	1,0	-6,4	0,9
France	2,4	2,3	0,3	-2,4	0,9
Germany	3,2	2,5	1,2	-5,3	0,3
Greece	4,5	4,0	2,9	-0,8	-0,1
Ireland	5,4	6,0	-3,0	-7,5	-2,5
Italy	2,0	1,6	-1,0	-5,1	0,2
Luxembourg	6,4	5,2	0,7	-4,8	-0,2
Malta	3,8	3,7	2,1	-2,1	0,5
Netherlands	3,4	3,6	2,0	-4,2	0,7
Portugal	1,4	1,9	0,0	-3,0	0,4
Slovakia	8,5	10,4	6,4	-4,7	3,7
Slovenia	5,9	6,8	3,5	-4,7	0,7
Spain	4,0	3,6	0,9	-3,8	-0,7

Source: International Monetary Fund (2009), p. 6; for 2009 estimates, for 2010 forecasts.

Even if one accepts overly optimistic IMF forecasts for the euro zone presented above, it is not difficult envisioning what will happen in the PIIGS if the VAT and other important taxes are significantly higher. Euphemistically, it will put downward pressure on economic activity, i.e., it will slow economic activity for years.<sup>72</sup> Higher taxes mean less investment, less investment means lower productivity growth and fewer jobs, and fewer jobs means lower demand, and so on along the downward, deflationary spiral. The certainty of such poor development is a factor to explain why authorities in some PIIGS and elsewhere hesitate to take this medicine.

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<sup>72</sup> Until September 2010, Italy and Ireland kept the VAT rates unchanged, while Portugal (21%), Spain (18%) and Greece (23%) shifted them upwards. This move in Greece induced annual inflation rate of 5,5% and decline of GDP of 5% on the annual basis. The latter was facilitated by other spending cuts as well.

Economic recovery would be the best option, since economic expansion would generate higher revenues, but is not available at the moment due to the ongoing economic crisis. Investment flourished in some PIIGS a decade ago, while now investors hesitate to go there or even leave countries. Out of five PIIGS, two experienced economic boom (Ireland, Spain), one saw moderate development (Greece) and two stagnated (Italy, Portugal) during 1999-2008. Ireland prospered because it conducted larger pro-market reforms from the mid 1980s to 2006. This attracted investors especially in the tradable sector, construction and real estate. Spain saw larger investment but was driven by the non-tradable sector (real estate, construction, services). Some authors assume the investment boom resulted from Spanish membership in the euro zone and significantly lower borrowing costs (Paul Krugman 2010). If so, why did capital inflow not happen in Portugal and Greece, also profiting from lower borrowing costs after entering the euro zone and also with attractive coastal locations? Alternatively, competition among Spanish regions and municipalities to attract real estate investment may explain capital inflow. It was a decisive factor in the Spanish boom. Italy and Portugal were unable to conduct reforms and thus stagnated from the 1990s on.

In part 4, I consider the main problems for the PIIGS to recover. The core is in the conjunction of labor market rigidity and a rapid rise in labor costs.

Another option for a country in trouble is to leave the euro zone until it settles the financial problems and return to the zone after it again satisfies the convergence criteria. How helpful is this for the euro zone on the one side and for a country's economy on the other side? Before the EU authorities decide to exclude a country from the euro zone, they should consider the following question: is it probable the excluded country - due to this move - will undergo greater political and economic instability adversely affecting the whole EU? It is naturally difficult to obtain a firm and reliable answer, because it would be a first in history and there is no control case, since experiments in history are impossible.

Eventually, the excluded country may affect the euro zone and the rest of the EU in two ways. First, Greek debt for example, is held by EU banks. According to some estimates 40% of this debt is in German and French banks. Some banks would face losses and

national governments should bail them out. (Otherwise, banks would collapse and eventually poison the rest of the banking system in a country.) Second, exports from the EU to Greece would be reduced, sending recessive waves throughout the EU.

The exclusion of a troublemaker from the euro zone would boost the common currency on the financial markets.<sup>73</sup> This will happen less due to the reduced pressure of the country's debt to common currency. More important would be the signal of improving discipline in the euro zone. The main problem is how to exclude a country from the euro zone if serious violations of its rules were never punished before and if there is not a procedure for exclusion now?

Let us now turn to the point of view of a troubled economy. If a country exits the euro zone, it will face a cost of reintroducing a national currency. Although this cost is high, it is a minor problem. A greater problem is the country's risk will rise, negatively affecting both interest rates for commercial activity and for new public debts. Salaries and pensions may be inflated, relaxing public finance from this burden. The degree of relaxation depends on the government's ability to resist pressure from unions and other interest groups. Via inflation and depreciation of national currency the country may regain competitiveness of its economy. This is the way to induce more investment, curb economy, exports and the standard of living. This will not happen overnight - it will require at least several years, and probably more than a decade. To survive such a diet would not be easy at all. However, the country cannot inflate its debt because it is denominated in euro bonds. On the contrary, in the case of higher inflation in national currency, more national units would be needed to service every euro of debt. All in all, this option is good for the euro zone and less good for the country in question. For the country in question, it would be better to stay in the euro zone and to regain its competitiveness via deregulation of the labor market, lower salaries and layoffs.

If the conclusion is it is better to keep the troubled economy in the euro zone, the four previously discussed options and their combinations are left. In the end, if nothing from four plus exit option

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<sup>73</sup> Officially, according the EU rules, a country can not be excluded from the Euro zone, never mind how big is the financial offense it does. It is a larger shortcoming of the EU legislation.

work, the country may default. Such a case is not envisioned by the convergence criteria and the Stability and Growth Pact, and it is difficult to figure out what would happen both with that country and the euro zone.

### **3. How to fix the problems in euro zone**

Faced with troubles of some countries that threatened to dissolve euro zone the EU bodies launched a handful ideas on how to react and prevent the damage. Ideas moved from faster and relatively cheaper medicines to long term, expensive and all-encompassing remedies. As a result, the euro zone countries, European Commission and the IMF agreed in March 2010 to a € 110bn loan for Greece, conditioned to implementation of harsh austerity measures.

A week later, EU leaders made two proposals to ensure long term fiscal stability. The first is the creation of the EFSF (European Financial Stability Facility), a private tool designed according to the SPV (Special Purpose Vehicle) and located in Luxembourg. The EU and IMF provided the “fund” of up to € 750bn. Some € 440bn will ensure euro zone countries, € 60bn the EU Commission, and the rest of up to € 250 will ensure the IMF.<sup>74</sup>

EFSF will sell bonds and use the money it raises to make loans to euro zone countries in trouble. The bonds will be backed up by guarantees provided by the EU Commission. The EFSF will collect money only after aid request by a country in need. Countries are reluctant to ask for help since such requests cause a strong setback to countries’ reputation – they look like bankrupted banana republic on

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<sup>74</sup> It turned out that the euro zone gurantee is ca € 250bn rather than € 440bn. If the EFSF’s debt bonds need to have an AAA rating, seven countries rated themselves AAA may provide that, like Germany, Austria, Holland, Finland, Luxembourg... These countries need to issue a guarantee only, but these guarantees cover € 250bn. The rest – i.e. € 190 out of € 440bn – is to be provided by other countries in the euro zone that enjoy a rating lower than AAA. However, these lower rated countries need to raise real money on the financial market, rather than to issue gurantees only. This fund raising up to now was not necessary, since assistance to Greece and Ireland required far bellow € 250bn. Sooner or later, assistance will exceede € 250bn and it is going to be very interesting how highly indebted countries, like Italy or Belgium, are going to raise money on financial markets, from Greece or Ireland not to speak at all. Countries ranked lower than AAA have objected from the beginning that this scheme is not fair.

knees in front of creditors. By hesitating to ask aid countries in trouble enlarge risks for the euro zone as a whole, because financial markets will start to speculate against the euro and other weaker euro zone countries. Both countries that have asked for aid up to now did so after serious political pressure from Brussels and capitals of the larger EU members. The EU-agreement allows the ECB (European Central Bank) to start buying government debt of countries in trouble, which is expected to reduce bond yields of countries in trouble.

The aid package provided a temporary relief both to countries in trouble and the euro zone. It averted a financial panic in the euro zone and provided additional time for countries in trouble to fix their public finances. The impact of aid on the status of troubled economies on financial markets was diverse. The aid provided cash for debt service and relieved financial pain of countries in question on the one side while the main financial indicators for these countries persisted to be negative. For example, countries' ratings for the PIIGS continued to deteriorate, yields rose in the beginning of euro crisis at the end of 2009 for 2-7 percentage points above the German, and never came back at the pre-crisis level, despite aid package. The cost of bank deposit insurance in the PIIGS rose from € 10.000-20.000 before the crisis to 300.000-700.000 per every ten million euro of deposits after crisis appeared. The costs for insurance of bank deposits also never came back after the aid package was implemented.

In addition to short term, there are also long term problems. The aid package expires in mid-2013; long term problems of the euro zone are not solved up to now and some of its member countries will continue to have difficulties beyond 2013. As a rule, some countries will face larger trouble at the end of 2013, than they did at the beginning of crisis in 2010. For example, according to the official EU estimates, it is expected that Greece will cumulate a public debt at the end of 2013 of over 150% of its GDP, while it was below 120% at the beginning of 2010. It is difficult to imagine how Greece might service such a debt in the light of stagnant or even declining economy from 2009 onwards. Similar problems will accompany other PIIGS.

European Union faces mounting pressure in recent months to cool off if not to fix long term euro zone risks. In order to do this it needs to reconcile different and diverging interests of its members. It is widely expected that the EU Summit on March 24-25, 2011 will produce a "credible and comprehensive" response to the crisis. The

press reported, ahead of the Summit, that the EU leaders agreed to create a new permanent fund (ESM – European Stability Mechanism) of up to € 500bn after mid-2013, when the temporary EFSF expires.<sup>75</sup> The EU leaders rejected<sup>76</sup> some proposals, but approved two fund changes in EFSF and forthcoming ESM. First, bailout fund will be able to make loans and in exceptional cases only to buy bonds during regular debt auctions. Second, the bailout fund will be at least partially financed via capital contributions from the euro zone countries, instead of current system on guaranties. Changes are announced, though the details of how purchases would work weren't specified. Also, original “pact for competitiveness” is renamed “A pact for the euro”, but a new version is vaguer than the original, and some provisions have been removed or softened.<sup>77</sup> Changes in the bailout mechanism reduce dangers of extensive bailouts, but they make harder for the EFSF (ESM) to prevent a government funding crisis from developing.

In waiting for Summit's results, let us discuss what needs to be done in the long term in order to save euro zone from larger damage or even from dissolution? It seems that three things are needed. First, it needs to be arranged who is going to pay debt accumulated in the euro zone countries with financial troubles? Second, what are the mechanisms of keeping a credible fiscal discipline in the euro zone? Third, how troubled euro zone economies may regain competitiveness?

Financial aid from the euro zone and IMF is costly and as such it makes future financial burden of the PIIGS much heavier. It is clear that Greece and some other countries cannot service huge public debt in the future on their own. Average interest rate on means provided from the euro zone countries and IMF is close to 6% per annum, while the growth rate of troubled economies is either around zero or very low. This makes the debt burden heavier with the lapse of time. So, some “restructuring” of debt is needed that includes debt forgiveness

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<sup>75</sup> Cf. Forelle & Fidler 2011.

<sup>76</sup> The EU leaders rejected calls to reduce interest rate on funds granted to Ireland as well as the ECB call to the EFSF to buy bonds (ca. € 77bn up to March 11, 2011) of troubled countries that the central bank accumulated. Greece asked for a two percentage points reduction in interest rates on funds from the EFSF, but a reduction of one percentage point was approved.

<sup>77</sup> Cf. EU 2011.

for a part of debt, longer period of repayment, lower rates, etc. This is clear, but less clear is who is going to bear the costs. Candidates are national governments (i.e. taxpayers), indebted countries (again taxpayers), commercial banks, depositors, IMF or all of them combined in some proportion. A combined option is likely, although it may be settled after long and complicated negotiations only that are unique for every country in question. ESM may stay below necessary level for intervention.

Second problem is even more complicated and it is related to the questions of future rules in the euro zone and their enforcement. One question is who may believe in success of tighter rules if more relaxed (that are employed now) were not enforced. Another question is the institutional nature of new rules: euro zone may be considered as a club where membership is guaranteed in the case of compliance to the prevailing rules. Otherwise, violators of rules may be expelled and they may return after they qualify again. However, according to the *Lisbon treaty* (2009) countries cannot be expelled from the euro zone. They may leave it on their own free will only. Another problem is that countries that leave the euro zone should leave the EU as well, again according to the *Lisbon treaty*. These provisos should be amended to allow expulsion from the euro zone without exclusion from the EU. Even more difficult question is how the Maastricht, convergence or euro zone criteria should look like. Tight rules would include low budgetary deficit, say, of 0,35% of GDP, like in Germany from 2015 on, public debt of up to 60% like now and a reasonable period of time for counties violating these rules to reduce deficits and debts along the new rules. Countries in trouble strongly oppose tighter rules and it is not going to be easy to negotiate and enforce them. “A pact for the euro” from March 11, 2011 recommends current fiscal rules (-3%/-60%) to be built in national legislation and the EU bodies to monitor and enforce the rules without a single word on fines and fines’ enforcement.

Plans to harmonize taxes and centralize economic management or even more ambitious idea to create a political union, are not necessary and will be damaging. Countries with high direct taxes (individual income tax, corporate profit tax) plea for longer that harmonization of these taxes is needed in order to prevent what they call an “unfair competition” from low tax countries. Lower corporate profit taxes from new members and Ireland and UK divert investment,

jobs, growth and income from high level to low level tax countries. Current situation allows tax competition among member countries with different tax regimes. It is a powerful tool that prevents emergence of tax cartels among the EU members, keeps competition among jurisdictions alive and enhances economic freedom. It also forces high tax countries to reduce their tax burdens. Tax harmonization would remove these checks and balances, create a tax nirvana and allow politicians to charge businesses with ever higher taxes. The EU members with such an outcome will be inferior in competition compared to their world rivals. For all of this tax harmonization is extremely harmful.

Even less desirable is a creation of political union in the EU. Contrary to economic union that enhances competition, reduces prices, improves quality of products and broadens freedom of choice, political union is based on completely different logic and principles. It reduces competition, promotes redistribution, reduces quality and reduces the scope of choice. In the light of that, economic union is desirable, while political is not. For that reason economic integration in the EU flourished, while political integration never developed to a higher degree. Political union will bring nothing good, putting aside deep divisions among the EU nations. Political union will fuel them and they may be strengthened to destroy current level of economic cooperation.

Ultimate aim of the rescue operation in the euro zone is neither to settle debts nor to restore fiscal discipline. It is rather to reform troubled economies and bring them back to the path of investment and prosperity. This basically would require a reform of the state and public sector on the one, and a reform of business environment on the other side. "A pact for the euro" merely speaks about the control of labor and pension costs, reform of the rigid labor market, higher investment in R & D, etc. These measures are useful, but they stop short of a more comprehensive reform needed.

If the EU is not able to solve the first problem (debts), it will not get even a chance to deal with two others (fiscal discipline, competitiveness). Financial markets would bankrupt the PIIGS one after the other, and turn down the euro. To solve the first aim is a necessary task of the whole effort. If the EU solves the first and ignores the two remaining aims, current debt troubles will be cured for a while, but soon they will be back as a result of missing fiscal

discipline and stagnant development. If the EU reaches the two first aims and stays short of the third, the landscape will regain security, but it would resemble to a highly developed but economically declining nirvana.

The ball is in the EU yard. In order to reach all three aims it will need a decade or more. However, financial markets and other actors will not wait for years to see some reasonable action. A deadline for the first aim is much shorter. The public needs to see a plan and corresponding action in months, anyway no later than in second half of 2012. Current aid program expires in mid-2013, and public and markets need to see what happens thereafter. A slightly extended deadline holds for the aim two. Years will be needed to negotiate and implement the negotiated solution. Finally, the most complex is the aim three, since it requires that two other aims are reached on the one side, and a lot of creative thinking and action in the subject that is next to be forgotten in Europe – designing attractive business environment with flourishing economic freedom.

All cards are still in the hands of European politicians and let us wait to see how they are going to play them. By wasting time and opportunities trumps are not going to be in the EU's hands.

#### **4. Concluding Remarks**

Threats to the euro are serious and for the first time in its short life, may be fatal. The single largest direct threat is a lack of discipline in the euro zone, while the single largest indirect threat is low competitiveness. The inability to punish or to exclude troublemakers in the past and now indicates discipline will be eroded rather than improved. If the case of Greece indicates to the PIIGS how the euro zone will behave when they enter the “Greek scenario”, this would be a signal of larger problems. Greek default cannot blow up the euro zone, but a default of several PIIGS can.

Options available for the euro zone countries in trouble are conditioned either upon complicated and costly domestic adjustments, risky moves (to leave euro zone temporary) or to pass complicated international negotiations (external bailouts). If countries in larger financial trouble like the PIIGS are excluded, the euro zone may manage to survive as a small currency area around Germany. If the PIIGS stay inside and their troubles grow, Germany and some other countries may consider an exit option. One option would be the euro

disappears as common currency and all members reintroduce national currencies. The end of euro will blow up the whole euro-integrations, because countries would turn to their self-interest. Europe would look for a new architecture and this would imply stronger competition among the European countries. This would raise the risk of conflicts.

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**THE PROCESS OF INTEGRATION OF  
THE REPUBLIC OF MACEDONIA IN THE EUROPEAN  
UNION – AN ECONOMIC AND BUSINESS APPROACH**

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**Abstract**

*The necessity of joining the European Union is the only official consensus that exists between political parties in Macedonia. Officially, everyone emphasizes the advantage of becoming part of the big European brotherhood. Officially, because the process of transition is still work in progress two decades from the country's independence. Therefore, we can easily say that there is more of an "imaginary process", rather than a real one. Indisputably, the name issue is a biggest obstacle in the process of integration of the Republic of Macedonia in the European Union. But, to be entirely honest, we have to admit that most of the homework has yet not been done for purely subjective reasons.*

*This paper attempts to emphasize four areas that are crucial to the acceleration of this process: integrations, institutions, investments, and intellect.*

**Key words:** *European Union; integrations; institutions; investments and intellect.*

**State of being "Neither here, nor there"**

One of the main obstacles is that Macedonia is caught in this state. According to international standards, Macedonia neither has a modern technology that would encourage production and allow competing on the European market, nor cheap work force. Apart from making a firm decision conditioned by the "good will" of politicians, the solution to this problem depends mostly on how fast and pain free the process of transition from socialistic into capitalist economy will be. This "social revolution" can be characterized as a period of early accumulation, as a period of creating the captains of Macedonian economy. This is not something new; on the contrary, it is just another déjà vu.

For example, in the United States this process took place during the so-called financial capitalism which lasted from 1850 till around 1933. This is the period when the English scientist Charles

Darwin published his theory on biological evolution under the title “The Origin of Species” in London in 1859. Its most famous phrase “survival of the fittest” echoed as a bell tower’s sound from the work “Principals of Sociology” by Herbert Spencer, who applied the biological principles on social development. In fact, he said that in order to develop stronger activities, weaker social institutions and business will probably have to be sacrificed.

This rationalization of business ethics as survival of the fittest was very popular among those who, being the fittest, survived well. People like S. Vanderbilt, A. Carnegie, J. Gould, J.D. Rockefeller and other members of the so-called group of “the thieves of the century” built magnificent empires. On the way up, these industrial captains who started from scratch and became ‘someone,’ destroyed many insignificant people and their little businesses. What is most important is that the era of financial capitalism was substituted with an era of the so-called national (state) capitalism (1933-1950)<sup>78</sup>, whose main motto was “it doesn’t matter how, as long as the trains arrive on time”. What is the right timing and course for Macedonia and its homo balkanicus, that "representative" of the past whose collective memory is encoded in ancient clerical and political divisions, and apocryphal stories? How to stop being a living artifact of the asymmetric ambitions, a fraction that is more useful in dividing rather than in multiplying and adding? Just like we do not have to go outside to find the enemy, as the enemy is right here at the reach of our hands, very often on our horizon, likewise is the answer right in front of us, rather inside of us, in our reshaped reasoning.

### **Nothing in itself is a whole**

First and foremost, nothing in itself is a whole. Macedonia is not an exception to this rule. It is a part of Europe and as such, it will continue to share the virtues and illnesses of the old continent. Without doubt: the future of this piece of land called Macedonia is critically tied to the European Union. We have to abandon the pointless daily political sophistry, the endless talk on the right timing for applying for EU membership, whether it should have been done

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<sup>78</sup> Jovanovski, Pance: *Stranskite direktni investicii i Republika Makedonija*, Ekonomski aspekti na upravuvanje so kvalitetot : Zbornik na trudovi od Međunarodnata konferencija : Skopje, 15-16 noemvri, Ekonomski fakultet, 2000, str.73-81.

yesterday or the day before, or several years ago. Numerous major mistakes with devastating consequences have been made in continuity vis-à-vis the European Union. The self-destructive vanity as "leaders in reforms" or the magic of portraying ourselves as "victims of global conspiracy" results in the cruel fact that the current (first) transition period in the Republic of Macedonia will be gambled in favor of the personal interests of certain individuals.

It is no longer important where, but who. "Made in" has been replaced by "made by".

In "The Power of Triads" published in 1985, Kenichi Ohmae argues that states are nothing but creations of governments. In the upcoming "integrated economy", as the author affirms, regardless of what politicians say, national feelings will encourage consumers to buy. The cashier is not interested in where you were born or where you live. When paying the bills, no one thinks of unemployment or the trade deficit. And they are right!

Today the state, revived through its institutions, has a completely different place and role. The economy is the study of how society manages its scarce resources. In most societies, resources are not allocated by a central planner, but through joint actions of millions of households and enterprises. There is no mystery about what "the economy" is. Whether talking about the economy of the municipality Kratovo, of small states or big nations, of Mozambique or the United States, or the whole world, the economy is simply a group of people who act through their mutual life cross-roads.<sup>79</sup>

### **Internationalization is not a novelty!**

The weakening of nation states is inseparably linked with the internationalization as the powerful force in the business world and beyond. Every day the world is getting smaller! With the advent of even faster financial and communication flows, the Globe is shrinking. Brands of products and services originating from one country like men suits "Pierre Cardin", pens "Mont Blanc", the German automobile "Mercedes", "McDonald's" hamburgers, Japanese sushi, Italian pizza, are accepted with great enthusiasm in many other countries. International trade is growing relentlessly. In recent decades, the number of multinational corporations increases in

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<sup>79</sup> Jovanovski, Pance: *Principi na ekonomija*, EURM, Skopje, 2009.

geometrical progression. The main reason is internationalization (globalization) - movement directed toward expansion of economic and social links between countries through the spread of market institutions and corporate philosophy that leads to narrowing of the world in economic terms.

According to many relevant evaluations, internationalization of the production process, may deservedly won a more prestigious title than - the most important economic characteristic of the twentieth century, inter alia, because of its influence on the structure of world economy as well as on the form of global political organization. In addition, global experience, particularly in the last few decades, positively and forcibly shows that those countries which development has relied on credit arrangements got into serious difficulties, but unlike them, countries that had a liberal policy towards foreign direct and portfolio investment noted high rates of growth of national product and exports.

### **Integration as a Prerequisite for Investments**

As a small country suffering from all illnesses of transition, the Republic of Macedonia should by no means lead an insular politics, fenced and limited to its own abilities and/or inabilities, at least because of the following two basic reasons:

1. autarchy (economic introversion of a country) is just a theoretical model, whose (in)applicability was also supported in practice by the debacle of the many variations of the social experiment, and
2. the dimensions of its current economic structure.

There exist no other views, at least not declared ones, on this stressed necessity for Republic of Macedonia's practical and active integration in the modern global economic trends. In fact, this is one of the few questions for which there is a consensus, both in a scientific point of view and among the political parties, which have all independently from one another included in their programs their own responsibility for creating a new and radically different strategy for the development of Macedonia's economy. Instead of the frequently used "controlled chaos of the initial accumulation", intentionally based on and falsely justified by the transitional processes, all these programs promise a new attitude towards putting an end to destructive movements and towards an evolutionary reanimation of Macedonian

economy by fully respecting and making use of all material and human resources.

Foreign direct investments impose a serious dilemma in the political life of a country. According to one view, they represent a loss of own economic independence, while according to another, they are necessary for the modernization of economy and for keeping pace with the modern global trends. And although there is consensus on the advantages of foreign investments, the question of how to attract them to the Republic of Macedonia is left open. It is a huge task as this interest is shared by almost all countries in the world and each of them has some advantages compared to the others. The practical experiences of the Far East and South American countries clearly suggest that it is not enough only to enact the necessary legal regulations. Above all, potential foreign partners need to be attracted by a more aggressive promotional activity, i.e. by creating actual investing possibilities and an institutional and legal atmosphere fit for foreign investments. These activities should not only be limited to the companies but should substantially be assisted by the country as well.

Aspiring to attract direct foreign investments, the Republic of Macedonia cannot alone remove the negative external factors (the political instability of the region) but can try to change a great part of the other factor that determine the foreign capital flow. Above all, this refers to the speeding up of the thorough economy system reformation, of the introduction of institutions that would bring a market-friendly atmosphere, and of the operation of a truly open and liberalized economy. Also, we have to bear in mind that the connection between the inflow of foreign capital and the process of transition is two-directional, i.e. that the foreign capital speeds up the transition, while on the other hand the dynamics of transition has a positive affect on the attraction of foreign capital.

Contrary to the populist belief that tax treatment and tax incentives are the main factors for attracting direct foreign investments, researches show that foreign investors are interested in obtaining new markets with a stable economic and institutional atmosphere, which primarily implies a transparent and relatively constant legal regulation.

Investments in Central and East Europe countries, where Macedonia has been classified by foreign investors, have certain advantages – low costs for workforce, raw materials and so on. But

often the foreign companies face problems that annul the expected positive effects. For example, according to an analysis of the London Business School based on the practical experiences of certain western companies that had already invested in East Europe, the main problems can be classified into several groups<sup>80</sup>:

1. high level of bureaucracy;
2. governments' inability or reluctance to curb crime;
3. few companies that meet the standards required by foreign companies, and
4. low productivity.

### **Intellect – Basic Means of Production**

According to deceased Pope John Paul II, land was in the past the key factor of production. Later it was replaced by capital. Now, the key factor is man, i.e. his knowledge.

The basic means of production is small, grey and in an average man it weighs about 1.3 kg. It is the brain.

In modern companies, between 70 and 80 per cent of job requires intellect! The mobilization of new forces is not simple. You can not just say “attention” and expect people to automatically jump on their feet. Nor will they passively stand in line. When power is in their hands, intimidations don't work. If they are intimidated, you are a dead man because you have employed the wrong people.

People are everything. Don't forget that even Jack Welsh from General Electric personally interviewed all applicants for the 500 positions in the company, admitting that he was doing nothing more than “selecting the right people for his company”. Bill Gates is also spending most of his valuable time on gathering the best staff for his company. There is nothing unusual here – with decades and centuries the world's best leaders are spending their valuable time to select and acquire the best possible people for their activities. This was the main concern for King Arthur, Cosmo Di Medici, Duke Ellington and even the US president Ronald Reagan<sup>81</sup>.

In an era of welfare for the organization and its leader, there is no time to rest on their laurels. The innovation demands competition

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<sup>80</sup> London Business School, *CISME Discussion Papers 10 Case Studies*, London, Feb., 1996

<sup>81</sup> Riderstrale R. and Nordstrom, K.: *Funky Business*, BookHouse Publishing AB, Stokholm, 2002, pp.212.

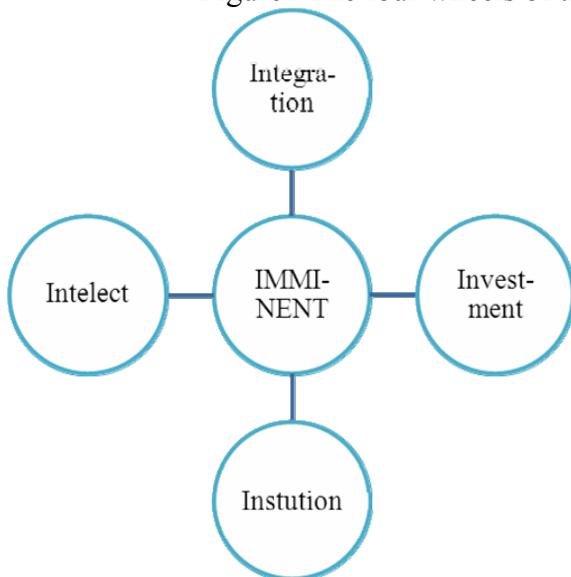
with ourselves. The key point for the development teams in the Silicon Valley is: “Make your products older.” A big number of companies don’t need new managers but a couple of skilled “destructive people” who will kill the old golden hens, making a new one<sup>82</sup>.

If you are not ready to pledge yourself for the purpose of this creative destruction, be sure that your competition will do that. It’s better to finish with our lunch before somebody steals it from our table. This applies to all companies, regardless of their age, size, activity or geographic origin.

#### **Four wheels of the “4I” rule**

We are people with a specific mentality. Only here you can find folk heroes such as Itar Pejo who makes his fellow villagers jump in the fog, practically into death, and this is supposed to be amusing and a reason to glorify him. Or when he makes the people in the market eat soap instead of cheese, and this is supposed to be funny. At the moment, our economy is similar with the mindset of Itar Pejo, a state where citizens’ wellbeing and the future of companies are sacrificed with ease and everyone is expected to give it a round of applause.<sup>83</sup>

Figure1 The four wheels of the “4I rule”



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<sup>82</sup> Peters, T., *The circle of innovation: You can't shrink your way to greatness*, Holder&Stoughton, London, 1997.

<sup>83</sup> Globus: *Itarpejovska ekonomija*, broj 106, 28 april 2009, Skopje.

"The vehicle which should take us in a brighter future" has four wheels. The first wheel is the state institutions and their mode of functioning. The second is the integrations into the global economy. Namely, Macedonia is not an attractive market, at least not for the big players, and in this period we tend to progress towards disintegration rather than integration.

The third wheel is the investments which the government wants to bring into our country, but I believe that the use of double standards for domestic and foreign investors is not a very good idea. Does the latest governmental measure mean that domestic investors should take their capital abroad and declare themselves as foreign investors, so that they could afterwards return it to the country and be able to use the benefits available to the foreign investors? And the fourth wheel is the intellect, because without knowledge and skill, there is no progress. Unfortunately, despite all big and announced activities of the government, more and more young intellectuals leave the country which means that we are investing abroad. Our workforce, according to the foreign investors' estimates, seems to be quite expensive<sup>84</sup>.

Without a firm decision and a determined will, these steps will not mean putting a definitive end to the practiced "controlled chaos of the primitive accumulation of capital in the Macedonian fashion". No one wants "bluffing states" with policies that are interestingly meager, with politicians that are indecisive or lacking in ideas to solve issues that are, without doubt, the most important in their electors' lives. These economies can freely be dubbed as "hopeless".

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<sup>84</sup> Utrinski vesnik: *Za stranska investicija 50 otsto bonus od Vladata*, broj 3081, 09 septemvri 2009, Skopje.

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**PROCREDIT BANK'S INFLUENCE ON  
MANAGEMENT DEVELOPMENT OF SME IN  
CENTRAL AND EASTERN EUROPE (SMALL AND  
MIDDLE-SIZED ENTERPRISES)**

**Svetlana Tomaceva**

*ProCredit Bank is a development-oriented full-service bank. We focus on providing excellent customer service and a wide range of banking products, to serve businesses that promote our development policy goals - job creation, formalization of economy, substitution of imports, and promotion of export.*

*SME sector in South-Eastern Europe face difficulties in terms of availability of funding sources, qualified working force, insufficient level of managerial skills and financial management. Most of the owners are at the same time general, financial and commercial managers, with insufficient level of knowledge in these areas. Also, companies from very small segment are constantly at the end of liquidity chain, causing difficulties in liquidity position and high rate of close downs at the end. Profit accumulated from business activities is often used for consumption or improvement of standard and not for improvement of business position and strengthening balance sheet of company.*

*We identify our role in supporting SME sector in Serbia through providing finance under favorable conditions, giving financial support to wider group of clients (even very small and entrepreneurs), tailoring adequate financial products according to needs, etc. Our approach to SME clients is individual and includes qualitative analysis of client's potential, visits to client's business premises and discussions with clients about their finances. It is our advantage to understand clients' business and to propose adequate service and products for their needs.*

*Our role in corporate governance is more than financing interested parties. We intercede for strengthening knowledge and skills, to secure and maintain long term relationship with our clients, to promote SME sector in Serbia and to participate in creating and improving regulatory framework.*

*All of the above implies the importance of strong support to SME sector. ProCredit Bank provides it in everyday activities by professional and dedicated staff. They are fully engaged in securing not only the best service, but also in giving adequate advice and to propose the most appropriate products.*

*We aim to position ourselves as proactive and responsible house bank for small business.*



**DR. SABINE SCHNEIDER,**  
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Sabine Schneider was born on 30<sup>th</sup> July in Austria. She completed Elementary and High school in Salzburg, as well as College of Tourism in Salzburg and she finished Training on Psychological Consultant in Munich. In 2002 she started her master study at Salzburg University - Academic Business Trainer, whilst in 2006 she graduated from Institute for Management, Salzburg and gain a title MBA.

In 2007 she gained the title of Master of Social and Economic Studies at the European University and in 2009 she defended her doctoral thesis at the European University.

Ms Schneider started her carrier as an Assistant in 1992, and at the moment she runs the firm Mosaik –as the owner and founder.

## **QUO VADIS CEE? AUSTRIA AS A PART OF CEE MANAGEMENT DEVELOPMENT**

**Dr. Sabine Schneider**

The knowledge in this presentation is attributed to various studies conducted by Roland Berger Strategy Consultants.

### **CEE Headquarters**

47% of Central and Eastern European Businesses have their headquarters in Vienna.

- Legal and Tax Conditions
- Proximity to Customers
- Accessibility to International Transport Infrastructure

### **CEE Economic Zone:**

#### **Decreasing Distance to Western Europe**

- CEE became noticeably more successful in the new millennium.
- After the crisis, there is a silver lining on the horizon.
- Many companies are planning strategic and operative measures, which I am going to expand on.

### **International Significance for the City of Vienna**

#### Infrastructure:

- Vienna has a rating of 82.1% with regards to quality of life standards.
- In terms of flight connections, Vienna is second only to Moscow with the best accessibility to CEE & SEE countries.

### **International Significance for the City of Vienna**

#### Infrastructure:

- With the future opening of the new train station in Vienna, rail travel to CEE & SEE countries will also be convenient.
- Vienna also stands out in international education programs. For example, the WU offers a CEE course of studies.

**Survey results claim that efficiency improvement and innovation will be on top of managers' agendas during the next decade.**

- In the advanced economies (AUT, CZE, HRV), innovation is thought to be more important than in other CEE countries.
- Compared to 2006, cost-related topics became more important than innovation-driven topics.
- Location shifts are not on the agenda of CEE managers.

**Human capital will remain a major bottleneck for the region's economic development.**

- The population will decrease in all CEE countries by 2030.
- Economic growth will be created and kept up by productivity gains.
- Austria profits from the migration from Germany, CEE and SEE
- Shrinking populations will be a phenomenon of rural areas but regional and urban centers will grow or stagnate.

**Austria has to change its position as a gatekeeper to Eastern Europe.**

- Austria's economy will see only moderate economic development; business volume will stagnate and the number of jobs will decline.
- The new markets in Central and Eastern Europe will become more stable and more important.
- The main problem over the next decade will be the aging population.

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HUMANISTIC SCIENCE

EUROPEAN  
BUSINESS AND  
MARKETING





**PROF. DR. LEPOSAVA ZECEVIC**

Prof. Dr. Leposava Zecevic was born on April 24, 1970 in Belgrade. She completed elementary and secondary school in Belgrade. In 1992, she completed undergraduate studies in Belgrade at the Faculty of Economics, Department of Marketing, with thesis titled "The product and price promotions as elements of the marketing mix". In 1994, Prof. Dr. Leposava Zecevic completed IFAM MBA University and acquired the title of BBA–IFAM – graduate manager of international business. In 1997, at the Faculty of International Management, she completed postgraduate Master's studies, with Master's theses on the topic: "International marketing and creative approach", thus gaining the title of Master of Science International Management. In 1999, at the Faculty of International Management Prof. Dr. Leposava Zecevic defended her doctoral theses entitled: "International Marketing – a global management approach" and thus acquired the title Doctor of Science International Management. At the Faculty of International Management in the same year, Dr. Zecevic gained the position of Assistant professor. In 2003, at the European University – Faculty of European Business and Marketing she gained the position of Associate professor for the courses: International Marketing and European Marketing, and in 2007, gained the position of Full Professor for the scientific field – management and business. Dr Leposava Zecevic is the Dean at the Faculty of European Business and Marketing and at the moment, she is full professor for the courses: Marketing Principles, International Marketing – global approach, Marketing Strategy and Management.

**DEVELOPMENT OF EUROPEAN BUSINESS  
AND MARKETING IN NEW EUROPE**

**Prof. Dr. Leposava Zecevic**

**Abstract**

*European marketing involves managing activities that lie somewhere between local and international marketing. Countries that are integrated into the EU and Euroland face marketing management with these member states that closely resembles local marketing. Marketing of European countries that are not in the EU or Euroland involves larger legal and economic differences. Social and cultural differences between European countries and these contribute to the difference between European and domestic marketing.*

*The most important factors of European Business and marketing in New Europe are:*

- 1. Process of connecting European with international marketing*
- 2. European market segmentation*
- 3. Brand-building of Integrated marketing communication*
- 4. European Marketing connection with modern consumer*

*Creative wealth and constant inspiration of European environment is the very incentive that encourage us to create, over and over again, the modern state of mind of the consumer with great social responsibility.*

**Key words:** *Marketing, International marketing, European marketing, globalization, market, modern marketing, European customer, segmentation, modern consumer, localization, internationalization, brand, communication, social responsibility, creativity, emotional communication with the brand, brand connection*

Marketing in Europe involves managing activities that lie somewhere between domestic and international marketing. Countries that are integrated into the EU and Euroland face marketing management with these member states that closely resembles local marketing. However, even within the EU and Euroland, legal and economic differences exist that makes European marketing different from local marketing. Marketing of European countries that are not in the EU or Euroland involves larger legal and economical differences. Social and cultural differences also exist between European countries and these contribute to the differences between European and local marketing. Companies that are not in Europe but wish to engage in transactions with European countries face a complex type of international marketing because they are dealing with countries that have similarities but also significant differences.

Along with the function of management, marketing is the most susceptible to influence from international operations. Whether it is engaged solely from domestic base or it is a full-fledged multinational company with a highly integrated global operations it will experience at least as many different marketing demands as there are foreign countries where the company operates. The complexity of European marketing originates from the need to understand different environments that are repeated during the company's delivery of services or products to foreign customers. In addition, the function of European marketing management has to respond to numerous requests.

1. Use of European marketing research to determine various possible end-users of services or products.
2. Classification of certain potential customers by segmentation method.
3. Products modification (or creating new ones) in order to satisfy the consumers in this way established markets (product strategy).
4. Establishing the European pricing strategy for deciding on range of sales prices which will help the company to reach significant benefits in selected international markets (products strategy)
5. Developing a single promotional strategy to inform potential customers of the characteristics and benefits of the product.
6. Founding of a single European distribution system that provides a satisfactory level of services for foreign consumers.

**Information for reaching marketing decisions, before entering international markets**

<b>MARKETING DECISIONS</b>	<b>REQUIRED INFORMATION</b>
1. To enter internationally or stay as a local marketer?	1. The assessment of global market supply of company's participation in it, in terms of local and international competition in comparison to local conditions.
2. Which market to enter?	2. Ranking of world markets by market potential, local competition and political situation.
3. How to enter target market?	3. Market size of international trade barriers, transport costs, local competition, government requirements, political stability
4. How to market on the target markets?	4. For each market, customer behavior, competitive practices, distribution channels, media and promotional practices, the experience of companies on these and other markets

To further clarify the European marketing, we have to consider the international marketing demands.

**INTERNATIONAL MARKETING AND GLOBALIZATION**

- International market is a whole new arena for the company and its managers. Companies operating on the international market need to adapt to foreign environments and to skillfully resolve conflicts between political, cultural and legal forces in order to achieve success.
- International Marketing is the science of skillful operating on the global market world arena. Economics, anthropology, cultural studies, geography, history, foreign languages, statistics, demography and many other areas are overlapping in order to help in global market studies.
- International marketing is happening every day around us, there are many influences on our life and is essential for the survival and successful operation of every company.

Globalization is an initiative in the business based on the belief that the world is increasingly homogenize and that difference between national markets are not only fading but will eventually disappear for some products. Therefore, companies need to globalize in terms of globalization of its international strategy, so it will be formulated in all markets and take advantage of the market accentuation, costs, environment and competitive factors.

Globalization may be seen as a result of the process which leads to the top of the pyramid – the process of international market entry and expansion. Before globalization, marketers largely applied various local strategies in various countries, where organization is operating as a profit center in every country. Each national unit is marketing a variety of products and services aimed at different consumers segments, using different marketing strategies with little or no operation's coordination between countries.

Of course, with increasing business operations, inefficiency caused by multiple local approach, together with external factors of markets integration, are beginning to exert pressure toward the improvement of coordination between countries and markets.

External and internal factors and macro and micro environment of the company create favorable conditions for the strategy development and deployment of resources on an international basis. These factors include the following:

- 1. Market factors**
- 2. Expenses factors**
- 3. Environment factors**
- 4. Competitive factors**

#### **CONDITIONS THAT CONTRIBUTED TO THE CREATION OF EUROPEAN MARKETING**

1. Technical-technologic development
2. Political factors
3. Economic conditions
4. Legal conditions
5. Government regulations
6. Traffic development
7. Tourism development
8. Media development
9. Infrastructure development

## **EUROPEAN MARKETING**

European marketing has similarities to international marketing in that it involves managing the multitude of decisions necessary when selling products (goods, services and combinations of goods and services) across frontiers. These frontiers lead to barriers that differentiate European marketing from domestic marketing. However, the strength of these barriers varies according to which European country is the focus of marketing activities. Thus members of the EU have fewer barriers than non-members, but there are still barriers. European countries with close connections to the EU, but that are not members, have lower barriers than those that have less links with the EU. Members of Euroland use the same currency – the euro – and therefore face zero barriers connected to exchange rate risk and currency transaction costs. This makes pricing and investment decisions within Euroland different from transactions with European countries that are not in Euroland.

### **THE CHARACTERISTICS OF EUROPEAN MARKETING**

European marketing involves creating and developing the means to manage the difference in legal, economic, social and cultural conditions in the European countries that are selected for business operations. The main difference between European marketing and local marketing relate to barriers to cross-frontier trade. These barriers differ according to whether the European country is a member of the EU and of Euroland. Moreover, for those European countries that are not members of the EU, the level of their integration into the EU is the main determinant of difference between European and local marketing. Countries that are not in Europe but wish to conduct business in Europe face a complicated marketing environment with many legal and economic similarities but with differences according to which part of Europe is under consideration. Social and cultural differences exist even within the highly integrated countries of the EU and these factors are very different when considering the countries of North-west Europe compared with Southern Europe or Eastern Europe. Even within these regions, pronounced social and cultural differences exist.

European marketing can be viewed as a special type of international marketing but with some similarities to domestic marketing for those European countries that have few legal, economic, social and cultural differences. The established members of the EU and those countries in Euroland have the lowest level of legal and economic barriers between these countries. However, even these countries have some significant barriers in these areas. Those European countries that will soon join the EU have more legal and economic barriers and these will only slowly be reduced as they integrate into EU system. Those European countries that are not members and which do not have close links with the EU have the highest legal and economic barriers. Companies not based in Europe face a complex international marketing environment, in terms of legal and economic barriers, because they face a set of countries that have different legal and economic conditions but some of them have relatively few significant differences. The social and cultural characteristics of Europe differ greatly, requiring considerable adjustments to European marketing strategies depending on which county is being considered. Clearly, Europe is a long way from being a single local market for European firms or a single foreign market for companies not based in Europe.

Modern business operation of large international companies that are of European origin are mostly became recognizable brand. During their business operating, they met their three most important business functions that needed to be met so the company could become a brand. These functions are:

1. The quality
2. Long-term and
3. Innovation

## **EUROPEAN MARKETING AND INTERNATIONAL MARKETING**

The section above has argued that the distinction between European and international marketing depend largely on differences in legal, economic, social and cultural differences. However, the most important factors relating to international marketing have a bearing on European marketing. The most important factors of European business and marketing in New Europe are as follows:

1. The process of connecting European with the international marketing;
2. Segmentation of the European market;
3. Brand-building of the European integrated marketing communications;
4. European marketing connections with the contemporary consumer.

### **1. The process of connecting European with the international marketing**

In the context of European marketing, Europeanisation (internationalization in the context of Europe) has similar implications to the impact of internalization on international marketing. Thus, the process of Europeanisation is likely to be complex and evolutionary and based on learning. This implies that European marketing strategies and activities adjust in line with the acquisition of information and its conversion into useful knowledge. In these circumstances, marketing strategies may begin with simple exporting; alternatively, more complex modes of entry such as direct foreign investment (DFI) may begin early in the Europeanisation process. The deciding factors is the knowledge that the company possesses on matters such as market conditions and the means of producing, promoting and distributing products in European markets. In the complex evolutionary view of the Europeanisation process, companies may start with a small number of countries to which they are geographically and culturally close or with a wide range of countries that are geographically and culturally disparate from the host country. These countries that are members of the EU and Euroland are more likely to be at the heart of this process because the legal and economic barriers are low and the EU contains the largest economies in Europe.

### **2. Segmentation of the European market;**

In this context, the adoption of distinctive demographic and geodemographic modalities of market research provides one route to the identification of cross-border segments. By examining some of these approaches we can look in greater depth at the whole issue of European market segmentation and extend consideration into some of the problems and difficulties of modern international market research.

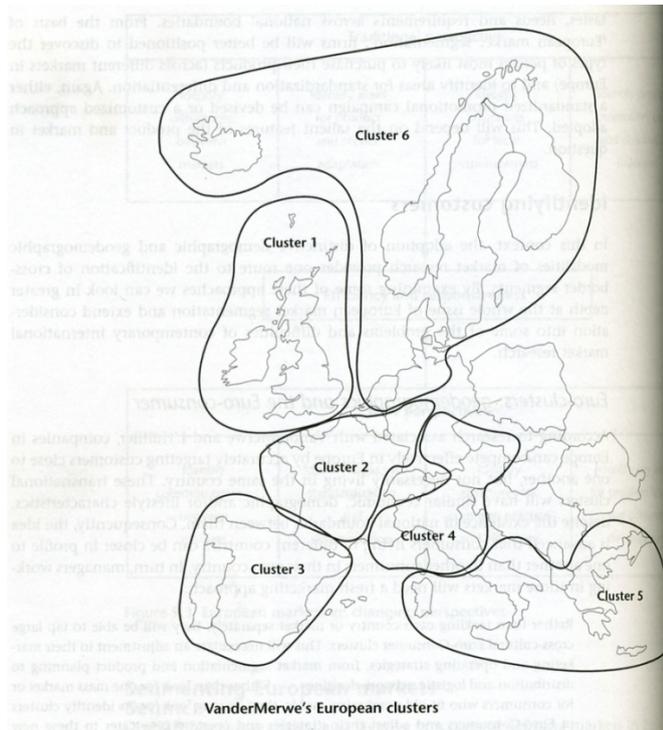
*European clusters: geodemographics and the Euro-consumer*

According to research associated with VanderMerwe and L'Hullier, companies in Europe can compete effectively in Europe by accurately targeting customers close to one another, but not necessarily living in the same country. These transnational clusters will have similar economic, demographic and/or lifestyle characteristics, despite the existence of national boundaries between them. Consequently, the idea is advanced that consumers living in different countries can be closer in profile to one another than to other consumers in their own country. In turn, managers working in those markets will need a fresh marketing approach:

Rather than tackling each country or market separately, they will be able to tap large cross-cultural Euro-Consumer clusters. This will necessitate an adjustment in their marketing and operating strategies, from market segmentation and product planning to distribution and logistic network decisions... Rather than look for one mass market or for consumers who fit old purchasing molds, they (managers) need to identify clusters of Euro-Consumers and adjust their strategies and operation to cater to these new transnational groups. (VanderMerwe and L'Hullier, 1989)

**The six clusters** identified by VanderMerwe and L'Hullier are:

- 1. the UK and Ireland (cluster 1)**
- 2. Central and Northern France, Southern Belgium, Central Germany and Luxembourg (cluster 2)**
- 3. Spain and Portugal (cluster 3)**
- 4. Southern Germany, Northern Italy, Southeastern France and Austria (cluster 4)**
- 5. South Italy and Greece (cluster 5) and**
- 6. Northern Germany, the Netherlands, Northern Belgium, Iceland, Norway, Finland and Denmark (cluster 6)**



These clusters are presented in above *Figure 1*. VanderMerwe (1993) went on to suggest that Europe will continue to be a complex set of independent operating areas, each dominated by certain similarities. These include:

- 1. Mass clusters with common consumer needs;**
- 2. Niche cluster** (where consumers have similar but non-identical needs);
- 3. Local and specialized clusters.**

In this context, market integration in Europe should facilitate access to cross-national segments, eliminating many entry barriers and heightening the potential for standardized products and promotions.

### **3. Brand-building of the European integrated marketing communications - IMC**

In integrated marketing communications, it is very important to get support from top management for the initiative, ensuring that

they understand the benefits of IMC, integrating on different management levels, ensuring that all managers, not just marketing managers, understand the importance of a consistent message – regardless it's about trucks for delivery or product quality. Also, advertising, public relations and promotion departments, should be linked in order to integrate their messages. Brand design manual book should contain common visual standards, for using the logo, face type, color, etc. Every company needs to focus on a clear strategy of marketing communication in a way “to tell their story” and to have crystal clear communication goals. In communication, the company should take advantage of sustainable competitive advantages and to ensure brand strategy.

In European IMC process, customers need to be in focus. It is known that the secret of marketing lies in the ability of what drives customers and translating that into competitive products and superior service. It is a way of products and services brand building, as well as a company as a brand.

In company brand building, a good strategy is the relationship with customers, giving customers added value. All communication should help to develop stronger relationships with customers. In this sense, the company is developing a marketing information system that defines who should use which information and when. The customer database, for example, can help in telesales, direct marketing and in sales force. IMC can help that vital information can be defined, collected and shared.

### **New age of integrated marketing communication**

In today's fast changing market, it is necessary to be communicative with the market and the audience as to obtain a competitive position in the market and to be in constant contact with the target audience. New age media, especially social networks like Facebook, Twitter, Linked In, etc provide opportunities for direct connection to customers, as well as the possibilities to listen customers needs and wishes, which is a good way to improve products, services and company image with the audience.

Facebook, as the most popular social network online, is giving us an example of how many companies, like Nike, Coca Cola and Milka use opportunities and promote their products there. The company Milka has unique game for buyers, with the slogan “A way

of giving”, as a nice example of how social network can improve emotional connection with the company. In Twitter social network, we can find examples of satisfied customers with favorable comments about their products.

Good-positioned companies use integrated marketing communications, which typically include promotional mix, but they also realize the communication with the quality of products and services, pricing, distribution channels and through the media of a new era.

In the process of company brand building, it is also important to have good external and internal communication within the company. When customers come into a company, the way employees talk with customers and among themselves is very important and has great influence in the company’s brand position on the market. It is acceptable for employees to have good communication with client but also it is important to have good

communication between employees, which represents a professional attitude in one company. Starbucks is a well known company where employees have good attitude, good skills for communication and social awareness. Customers like Starbucks for several reasons: they love their high-quality coffee, very friendly staff, relaxed atmosphere, value added service and an emotional connection between the staff. This is a good example for customers who are aware of the brand, they have connections with the brand and reactions, with stimulation of excellent integrated marketing communication mix.

New age medias, shown in *Figure2.* below, assist in communication with the audience in the process of listening to the customers needs and wishes. Giving additional value to customers includes a holistic approach, transparent communication and socially responsible business. It is known that the key of a successful brand building lies in understanding customers needs and wishes, as well in transparent communication with all market participants.

In integrated marketing communications, a company should be socially responsible, transparent and open to new communication influence. Today it is much easier than ever to keep in touch with customers, but this involves strategies, a good attitude, and sophisticated approach, because customers have more specific needs

and wishes, as fast-growing company needs to understand and find a way to satisfy even more than expected.

In this way, they make customers who are trustworthy, who are part of the company, who advocate for this company's products and services. It is easier to keep customers than to find and satisfy new ones, so companies need to approach customers honestly and with respect.



*Figure 2. New age media*

#### **4. European marketing connections with the contemporary consumer.**

Marketing is the relationship between consumers and producers in the market, with making income, i.e. profit. In modern society, the consumer always has new needs, wishes, desires, thoughts, to which the producer has to respond promptly, i.e. in the

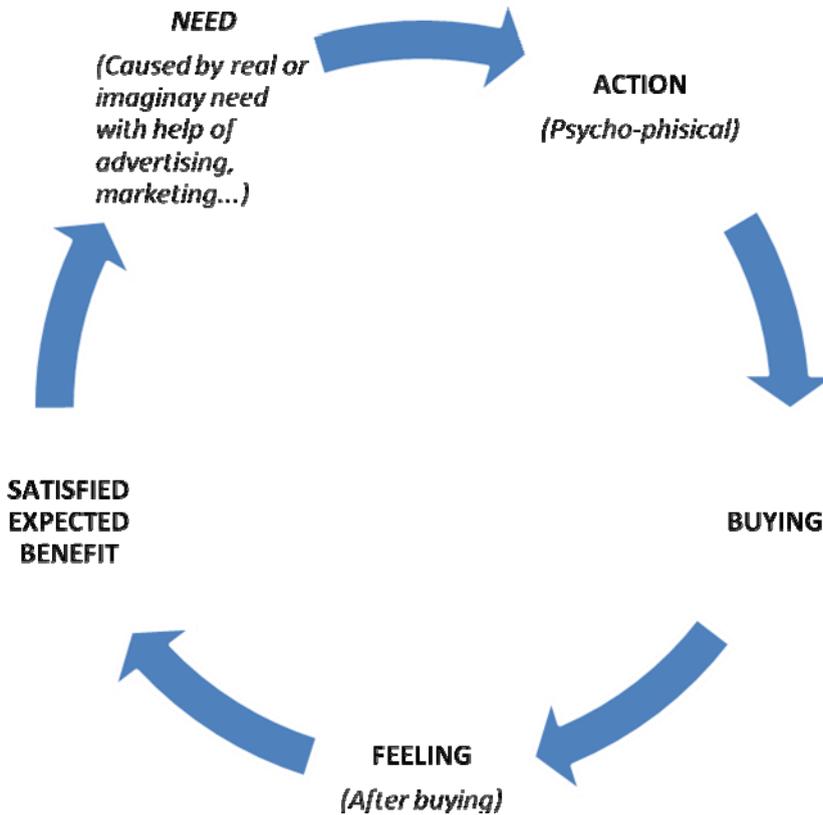
right time. Have these new needs arisen in heads (minds) of consumers or in some research centre of a certain company or in an ingenious reflection of the marketing team consisting of top managers, designers...

For example, we were taught, once, 1970s and 1980s of the last century, that chewing gums are harmful for the health of the teeth, mouth, stomach; we were intimidated that the gum is dangerous for consumption; while the producers discretely produced chewing gums, they didn't promote them aggressively and the most popular were gums in cigarette shape. Chewing gums were bought apiece and reminded on an adult product – cigarettes. At that time, as now, cigarettes had absolutely harmful effect, but they were labeled as adult product, with “charm” but not as a product that can cause dying (as today, we are absolutely sure this is the fact, but this black and white label on every pack of cigarettes does not cause fear, only a reprehension which we don't take seriously; what else can scare us, especially in Serbia?).

Let us return to the favorite thesis of the product – chewing gum, once harmful (minus) that grows from a negative connotation into a positive one (plus). Gums are now useful for dental health, for caries, the jaw, the nervousness, for the introduction moment, the smile, the code of conduct. Today, this product is not considered to be harmful but certainly useful, with a variety of flavors, colors and from different manufacturers. This is just an example how to create new changed views through the modern marketing of products that are receiving high profits and changing relationship between consumers and producers.

Of course, for generations, consumers fully evolved and, we would say, they became even spoiled, they absolutely must have everything and immediately, thus, this period between wishes, thoughts and satisfying needs has been reduced.

Without thinking about it, whether this product is in that place of purchase, the result of a complex effort and work of at least a thousand people, do customers ever think about it?



In modern European marketing, this happiness when buying is connected to the emotional state, connection of the consumer with the company, i.e. brand, because, in modern times, everything can let us down (work, health, husband, boyfriend), but our well-chosen product will not let us down, it is waiting for us on the shelf (the only surprise might happen if we do not hurry because of the large fluctuation of the product). This is precisely the result of modern standardized marketing performance of companies that have become the brand.

The fact that the product is waiting for us on the shelf, which is embedded with perfectly focused attention for the product, is immeasurable thing for a modern consumer, i.e. an individual. The company is putting a focus on the consumer and the atmosphere that it

is expected by the consumer, which exactly represents the relationship between the target group of consumers and the brand, i.e. the company that wouldn't let down this target group, responding constantly to their thoughts, desires and wishes.

Brand is the atmosphere generated by a particular company (style, product standardization, sale, promotion: then design, smell, taste; expectation; accuracy; vision, selected and trained staff, etc).

The target group of consumers is the group of people to whom the product is intended.

### **Modern marketing**



Market research used to be conducted within the company, the producer, and it was about testing through surveys, random samples of people of different demographic groups. Today, this is the same, but the manner is much easier, because of the technology development, thus Facebook and other social networks present the perfect manner for market research, you just need a good way to put this subject into the research.

It is perfectly normal for young generation to like Coke, McDonalds, MTV, and for us, born in seventies, the main question was: do you love mom or dad more, these kind of questions are no longer asked, because this is normal and there is no time for "it", but the brands are absolutely loved and they became an integral part of both practical and emotional lives of young consumers.

The process of buying is done with a style. For example, little girls, seeing a new product on TV, they are "rushing" into action, but the "rushing" would be with a style, on high heels, because this is a new way of entertainment, enjoyment and need of a modern lifestyle.

The feeling after buying is good, because we have done something useful, we get tired and the result is carried home as a

trophy or a prize. Since we trusted the company and it has met all our expectations, we are happy and satisfied, at least as a consumer and as a human being.

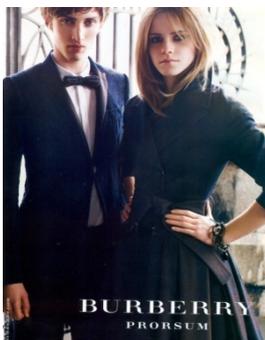
Innovative products makes life easier and drive modern consumer to be constantly in trend.

### **European marketing – perspectives and strategies**

European marketing is dominated by brands of European countries with strong cultural and historical specificities, origins and heritages.

Industries in which brands are expressed, by countries:

- Spain: fashion, music, tourism, television, TV industry – Media
- Italy: fashion, music, food, TV quizzes, tourism, entertainment, sport
- France: food, fashion industry, perfumes, cars, Cannes Film Festival
- United Kingdom: science, film, fashion, music, sports
- Austria: banks, cars
- Serbia – proposals for standardization of Serbia as a positive brand (agriculture, food industry, tourism, fashion industry, science, sport):
  - The family – a couple that will be emphasized, monitoring their love and their way of life
  - The Science – highlighting our achievements and appreciating our experts
  - Our products – emphasizing and protecting our own products
  - Sport – standardized, media monitoring the success of our top athletes
    - Cartoon – about Kraljevic Marko and fairy Raviojla and the horse Šarac, preferably, co-produced with Walt Disney Company
    - Music industry



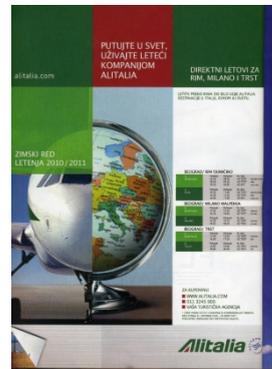
European global marketing company, unique for all markets with special emphasis on the origin of the company through a presentation of their latest campaign for the company

*Burberry*, is showing British media star, Emma Thompson, famous by the film *Harry Potter*, where she plays Hermione.

An excellent example of European international company which creatively emphasizes company - its function and its origin

Marketing strategy of European marketing and its perspective is reflected precisely in the brand standardization of European companies with centralized marketing management. These companies have shown the best results and are a true recipe for long-term business. Compared to the industry which they belong and whether they are engaged with regular, special or preferred products (services), marketing function adaptation may be proposed (of a product, price, promotion, distribution), but the expected benefit is the best satisfied by product (service) standardization as well as the marketing approach (visual image, training of the staff, employees behavior, marketing campaigns), because this is the only way a consumer will never be disappointed.

Special contribution of company which precisely makes them to be a brand of European origin is an emotional communication with the consumer (for example, Zara – Spain, Benetton – Italy, Mercedes – Germany, Peugeot – France) that is, also, extended interaction and connection between consumers and companies, as well as a recipe for company's perspective and future. To conclude, European marketing long-term perspective is reflected in the quality, innovation and interactive marketing communication, as well as in constant communication with the consumer in order to keep European company sustainable.



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She continued her career at the Faculty of European Business and Marketing, as an English language lecturer, in 2005.

She acquired Master degree at the Faculty of European Business and Marketing, having defended MA thesis "Influence of international cultural communication on business", and thus broadened spheres of interest to the frames of cultural diversities in business and management.

She participated as associate in preparation of the books of Olgica Zecevic Stanojevic: "European Cultural Environment" in 2007. and "Cultural Relations" in 2008.

Today, she works as an English teacher and assistant for subjects in the field of management and business, at the Faculty of European Business and Marketing of European University.

Prof. Dr. Olgica Zecevic Stanojevic  
M.Sc. Ivana Baosic

## **INTERNATIONAL CULTURAL COMMUNICATION - FORMS AND MODELS**

### **Summary**

*This work gives theoretical and practical analysis of forms and models of listening within international cultural communication. Process of business integration made our cultural surrounding become a real intercultural mosaic, comprised of different languages, dialects, colours, signs... We sometimes ask ourselves if it is possible to be noticed in such intercultural wealth. The answer is our uniqueness and preservation of our cultural characteristics, but at the same time support of different cultures as well.*

*The importance of knowing cultures is emphasised in the work, as well as the significance of knowing different expectations and models of listening worldwide. In order to advance different aspects of our lives, and facilitate exchange of information, we should learn more about different models of communication.*

*Listening presents extremely important skill of communication, and depending on cultural frames, there are different models of listening. By knowing differences in models of listening among Anglo-Saxons, Mediterranean, Central-European, South-East European cultures it is manageable to put international cultural communication in the frames adjusted to the listener, and thus reach the goal of communication. The development of listening skills is of great importance concerning the fact that managers and business people spend the most of their time in the process of communication.*

*Key words: Intercultural sensitivity, subjective and objective culture, ethnorelativism, moderation, verbal and non verbal communication, models of listening*

### **1. Cultures and international cultural communication**

Continual encounters of different cultures make communication open and dynamic, as well as challenging for people of different cultural background. Culture is changeable when we pass national and regional borders, but it does not mean that communication stops. The need for communication does not know the borders, thus it is of great importance to know cultures and communication patterns. If we are aware of cultures, we can efficiently gain the goal of communication, but it is also important to gain knowledge concerning other cultural frames and use it when encountering other cultures.

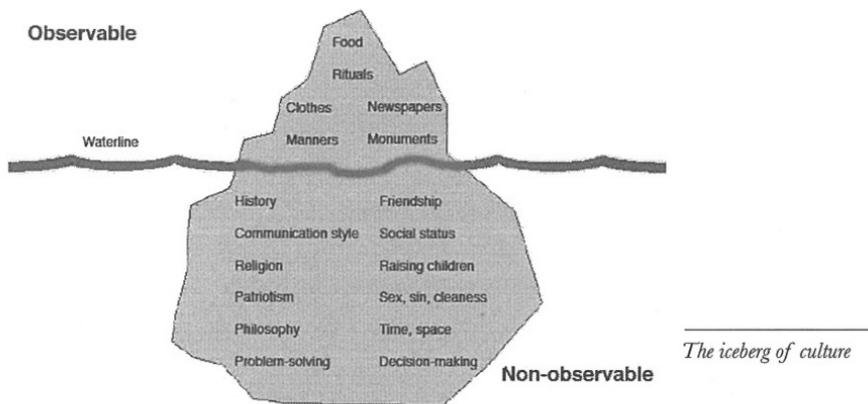
***Culture is a system of acquired knowledge and beliefs of a group of people that influence the system of values, attitudes, behaviour, feelings and opinion of the people from the group.***

Culture is a dynamic system of rules, explicit and implicit, that are set by the group in order to ensure their survival. These rules comprise attitudes, values, beliefs, norms and behaviour, shared by the group, which are differently set in different groups, and which are passed from generation to generation, and are relatively stable, with potential to change during the time.

Culture is what water is to a fish. We usually take it for granted, and we are not aware of our own culture until we are outside of it, when we realize that our basic values and assumptions are not universal.

Culture encompasses all cultural things that are visible: art, literature, monuments, food, manners, clothes...These visible aspects of culture are just one part of it, and they are called *objective culture*. Other aspect of culture which is invisible and needs to be analysed and learnt is called *subjective culture* and comprises shared patterns of beliefs, behaviours, communication style, decision-making process, religion, time and space orientation...In order to generate real intercultural communication it is necessary to go below the visible level of culture and learn more about invisible elements which have great impact in communication.

The most commonly used metaphor for culture is the iceberg. Everything that is above waterline is objective culture, while non-observable parts of the iceberg are called subjective culture.



Communication is a part of each culture. The most of our needs, like everything that makes us people, has communication in its root. The human need for love and intimacy is the result of communication; we are educated through the process of communication. Communication is the part of our lives and cultures cannot survive without communication, which leads to its significance, and its influence worldwide.

Successful communication means that we are satisfied and thrilled, which leads to pleasant atmosphere. Precise and clear transfer of information, from one source to another enables successful communication.

***International cultural communication presents exchange of verbal messages (words) and non-verbal messages (stand, tone, pause, appearance) between people of different cultures.***

The process of communication starts a sender who has a thought. The thought becomes the symbol, such as sound, (language), and body language as well which is sent to a receiver.

This process is called coding of the message. The meaning of the symbols is being translated by the receiver, and that process is called decoding. This model is appropriate to each communication pattern.

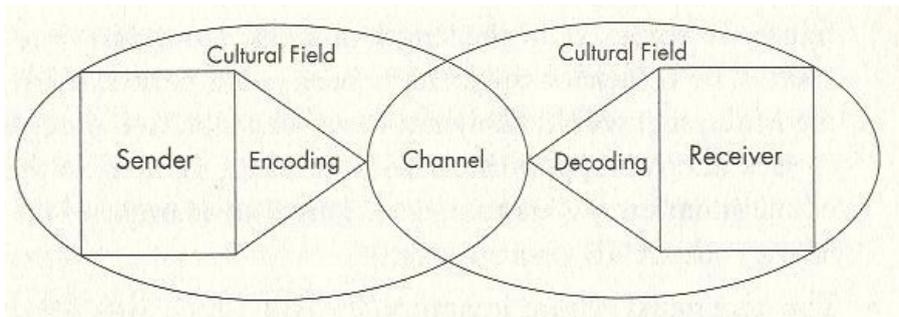


Figure 1. The process of international cultural communication

When both sender and receiver belong to the same cultural field, communication is held in simple manner. However, risk of bad communication lies in the fact that receiver of information belongs to different culture which comprises different rules and values. This pattern of communication presents intercultural communication where the sender makes symbolic meanings based on personal assumptions and belief, that are sent to others who do not share the same values.

When we find ourselves in our own cultural background, we usually, unconsciously do a lot of things, we do not analyse or give additional explanations, everything is already implied. However, when we find ourselves in new surrounding it would be recommended to adjust our cultural frames to the new cultural surrounding. Correct perception of other culture as well as our adjustment to conditions and rules of new culture releases precise answers from the receiver.

By studying the codes of another culture and their impact on behaviour, we learn more about ourselves. Those who understand others as well as themselves will achieve proper goals in communication process.

In order to make international cultural communication successful it is necessary to gain knowledge and skills of communication, but also to show flexibility and perceive changes of other culture.

Capability of adjustment to different cultural conditions, as well as development of awareness about differences among cultures leads us to effective and efficient communication.

Development of cultural awareness implies knowledge about personal cultural values, ideas and emotions, as well as interest for other cultures and different cultural values.

It is advisable to perceive differences among cultures only through cultural frame, and to show respect and support to differences.

The main point in intercultural understanding is to understand ourselves, since only those who understand others the way they understand themselves can make succesful communication.

The ancient Roman dictum “Knowledge is power“, presents the main device in international cultural communication. By learning to be aware of our own cultural heritage, it is possible to comprehend other cultural behaviour more objectively and behave accordingly. we will be ready to acquire knowledge about different cultures which leads us to succesful communication process.

Extreme ethnorelativism	Intercultural sensitivity	Extrema ethnocentrism
Excess	<b>Modesty</b>	Deficiency

*Figure2. Real and alternative values of communication*

As it is presented in Figure1. modesty is the basis of all ethical principles and values of communication . Successful communication implies our capability to perceive cultural enviroinment through our cultural frames and thus develop our potentials, but also to be tolerant to differenz cultural stands and views.

Development of cultural sensitivity, ethnorelativism, open perception of different cultural frames make us become skillfull in communication which implies presentations within intercultural teams, leadership and negotiations across cultures. Cultural sensitivity makes us become aware of nuances within international cultural communication, and thus gain efficient and effective interaction with different cultures.

If we want to reach conditions of succesful international communication it is necessary to be aware of personal potential as well as potental an cultural variations of others.

Knowledge about other cultures gives the route of successful communication, as well as possibility to learn more about ourselves and our culture.

## **2. Forms of international cultural communication**

International cultural communication can be verbal (written and oral) and non-verbal. Usually, verbal and non-verbal communication are combined together in order to make better understanding among people.

Verbal communication makes a great part of whole communication process, especially in polychronic cultures, such as Italian, French and Mediterranean cultures in general. Possibility of immediate answer and reaction to received message presents the reason why these cultures use verbal communication the most. Verbal communication is always followed by non-verbal messages (eye contact, facial expression, touch, posture, tone of voice, attitude, clothing artifacts. that have great significance in understanding among different cultures.

Subtle signals have great impact on goal of communication, and present important part of verbal communication in general.

Beside verbal communication which implies precise use of language, non-verbal communication has enormous significance as well. Non-verbal communication comprises kinetic behavior (body language, facial expression, touch...), physical characteristics (posture, stand, height, weight, eye or hair colour), paralanguage (the tone of voice, speed, pitch, laughter), time and space orientation.

Another form of non-verbal communication is *touch* with its different variations across cultures. Some cultures insist on close relation, while others insist on distance. Non-verbal language is used to add, reinforce and support verbal-code system in general, and thus make international cultural communication successful.

Misunderstanding will occur if there is no awareness among cultures concerning gestures and signals of some other culture. In German culture, people are taught to be serious and credible as well as to stick to business when communicating. In British culture, emphasis is placed first on the relationship, then business. If the British start low-key conversation with zealous Germans in order to create good relationships, serious Germans will understand that like an insult, since this kind of behavior is not in accordance with their assurance.

Beside necessary knowledge about other culture, it is also of great importance to have precise goal of communication. In order to use suitable vocabulary, visual devices and content in the process of communication we must know the other culture. If participants of international cultural communication belong to different professional background, or have different interests in general, it is advisable to find and emphasize their common characteristics. Time orientation during presentation or intercultural communication is important in order to use it efficiently. If we organize material well, and transfer simple and well planned message, the intercultural comprehension will be improved.

Cultural expectations differ worldwide, thus it is necessary to adjust the content of the message as well as the style and model of communication, in order to get right answers. Since international cultural communication considers different cultural encounters which cannot be predicted in advance, it would be necessary to be aware of possible changes in style during the process of communication.

### **3. Models of listening in international cultural communication**

Listening is extremely important skill of communication and depending on cultural frames different models of listening appear. Culture has significant role and influence in communication, as well as in the way of listening during intercultural interaction.

There are four basic skills of communication: writing, reading, speech and listening, and the least attention is dedicated to listening and it is not formally taught in schools. It is thought that listening skill is being developed naturally within culture.

Since managers spend the most of their time while communicating, development of this skill is important. Barriers in communications occur as a result of wrong assumptions, especially when a person who listens is in the process of judging, approval or disagreement of received message. In order to surmount obstacles in communication process effective speaker should be attentive, and ready to understand direct and subtle meaning of the message.

A speaker should show openness, patience and will for communication as well as awareness of verbal and non-verbal signs.

Listening is an active process, open and dynamic, and it has different variations worldwide. Although each nationality has its own specific style of listening, they could be divided into rough categories.

*Scandinavian cultures* (Danes, Finns, Norwegians and Swedes) could be described as the best listeners, partly because their own natural reticence prevents them from interrupting others, although their natural calm concentration has also great impact as well.

Nobody listens more carefully than the Finns, who never interrupt a speaker. In fun it is said that the price of their attention is one cup of coffee per day. During the conversation they give no feedback, so as not to interrupt the speaker.

Swedes are very cooperative listeners, who give encouraging, whispered feedback during the presentation. They want facts and technical details and enormous amount of context.

Danes are always smiling, but in fact hide a dose of criticism. They create counter-proposals while listening and give immediate feedback. Speakers should be modest and humorous.

Norwegians listen in good mood, but quickly develop strong opinions which they soon expose. They are data oriented but appreciate a personal touch.

Generally, Scandinavian countries have a lot of characteristics in common, concerning the expectations during some presentation. These cultures appreciate design, quality, as well as modern and useful product. According to this, it is important that presentation is simple, without exaggeration, but with technical details and necessary information concerning the quality.

*Central-European cultures* are also good listeners. Both Germans and Dutch are hungry for information, though the latter wish to start a debate fairly soon.

Disciplined Germans have perhaps the longest attention span of any nationality, diligently making notes as they listen. Germans are very formal in communication with other cultures, so they expect others to be the same. Since Germans belong to low-context culture, they need information and technical details related to the quality and well organized presentation, without jokes and humor. They usually become suspicious if things sound too simple.

Austrians belong to low-context, monochronic culture as well, so they need technical information and listen carefully to a speaker.

Hungarians want to speak themselves, and they are not the best of listeners and behave impolitely in the presence of a boring speaker. They consider themselves sophisticated, so it is necessary to possess charisma, sense of humor, challenge and brevity in order to attract their attention.

*South-East European cultures* such as Greece, Bulgaria, Romania, Macedonia, Serbia are mostly polychromic with high context, and while listening the speaker they want to hear some interesting and attractive information. If we want to make successful communication it is important to intrigue and inspire these cultures, and to humorous as well.

Cultures of *East Europe and Baltic*, such as Russians, Czech, Polish expect rhetorical presentation fulfilled with feelings and personal attitude. They need to be respected and to feel empathy, but they also appreciate open and direct speakers who send personal message and thus develop confidence.

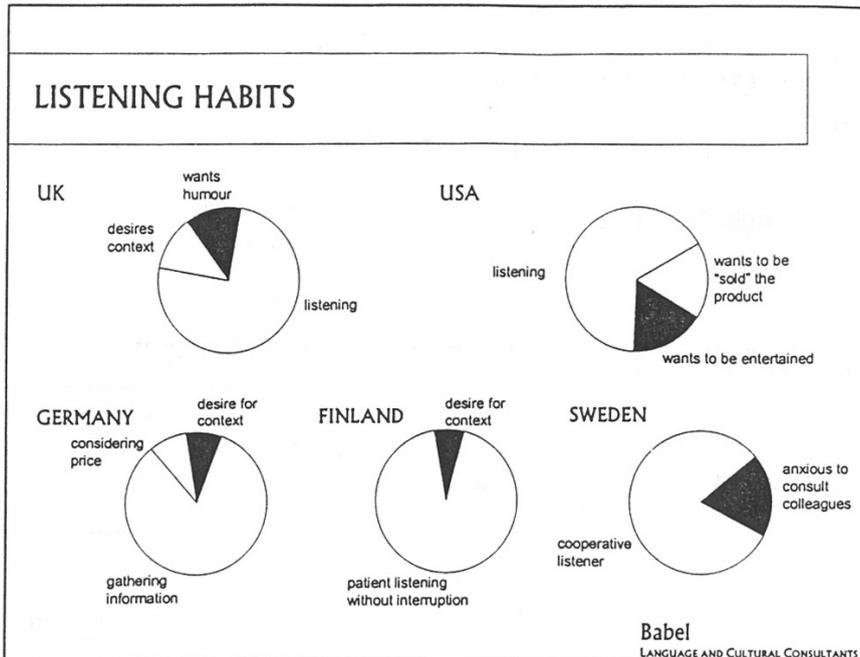
As far as the *Anglo-Saxons* are concerned, English and Canadians pay polite attention as long as the speaker is reasonably low-key. Debate is required afterwards. Australians are more cynical and they are not too serious, but, like Americans they will listen carefully if technical details are imparted. It is advisable not to be pompous in front of Australians, since they show disrespect for anyone in superior position who seeks to promote oneself. It is also inadvisable to be too serious or complicated. Australians are fond of jokes and anecdotes, and friendly and lively speaker.

Americans tend to lose concentration if they are not entertained in some way. They are also keen on acquiring technical details, want business atmosphere, and their attention wanders if speakers are boring. Americans expect and appreciate a hard sell, as well as humor and jokes from life. They usually begin their presentation with some joke and expect others to behave in the same way.

Canadians like modest and unpretentious speakers who provide facts with gentle humor. Unlike Americans, they do not want the hard sell. They enjoy early debate with you, but listen politely to all you have to say first.

Humor is inseparable part of British. They listen in order to construct their reply, and unlike Americans who admire contemporary approach, British pay attention to tradition. Polite listening is

mandatory, though they can occasionally interrupt in order to get information. Feedback is always lively and productive.



*Latins* are not attentive listeners as they want to speak themselves. A charismatic speaker may attract them 30 minutes or more, but the French do not believe that foreigners can teach them very much. Italians have busy minds and wander. Spaniards dislike monologues, since they want to participate in communication and argue vigorously. They pay attention to physical characteristics and mannerism of a speaker, who must be imaginative in order to hold their attention.

Latin Americans show interest in new ideas, but are skeptical about European caution.

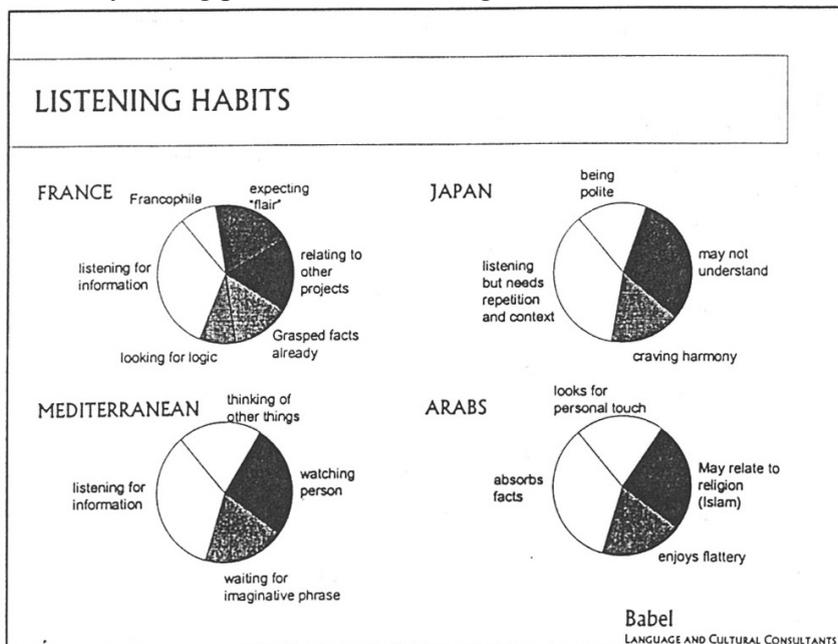
While listening, Italians are busy by formulating their reply, which they will deliver as soon as you make a pause. They are anxious to be engaged in a dialogue, which will soon define the relationship between you. This model of listening is completely opposite to Japan, where it is advisable to make a pause, in order to think about right answers during the silence. Italians expect friendly attitude and

flexibility during the communication process. They also pay attention to visual impression, unique style of the speaker.

In Far-East cultures such as Japan, China, Korea people listen carefully in order to receive right message. The most of business people use English as lingua franca in modern business communication.

Japanese people are disciplined and attentive, and the way you address them is what matters, since they will get precise information from the printed material. Japanese as Chinese expect presentation to be modest and soft-spoken, with respectful attitude, in order to reach and create harmony.

Chinese expect respectful attitude towards older people. Mainland Chinese are eager to acquire skills of Westerners, so they listen carefully and patiently, although the most of them need a translator. The manner of the speaker is considered more important than the content. They are traditionally suspicious of foreigners, so it is necessary a long period and effort to gain their confidence.



In general, it is advisable for speaker to familiarize in advance with the traditional expectations of culture to be addressed, while style and content should be adapted accordingly.

#### **4. Conclusion**

Nowadays, it is important to reach goals and agreements in business world, with help of knowledge and responsibility towards different expectations across cultures. If we want to make international cultural communication successful it is necessary to appreciate and respect cultural differences, by showing proper knowledge about culture we communicate with, and by taking into consideration the expectations of other culture. Knowledge and skills of communication will lead us to precise answers.

International cultural communication brings responsibility and uncertainty, since there are different expectations across cultures, so it is necessary to adjust our skills of communication to other culture. Adaptation considers that we give to other cultures what is being expected, and thus create effective and efficient communication.

International cultural communication implies exchange of different cultural principles, norms, standards, as well as feelings, thoughts, and expectations across cultures.

Process of business integration made our cultural surrounding become a real intercultural mosaic, comprised of different languages, dialects, colours, signs... We sometimes ask ourselves if it is possible to be noticed in such intercultural wealth. The answer is in our uniqueness and preservation of our cultural characteristics, but at the same time in support of different cultures as well.

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## **THE ROLE OF MANAGEMENT ACCOUNTING IN THE DEVELOPMENT OF INTERNATIONAL BUSINESS**

Management of multinational companies, in order to gain profit, needs to make effective decisions regarding the choice of business practices and strategies to be followed or in which countries should business operations be located. This requires accurate and timely information. Top managers of multinational companies devote much time, talent and resources to collecting, reporting and interpretation of data related to various factors.

Only after such information is collected, analysed and ready for use, the management can develop different options for making decisions. As a result, managers of multinational companies can formulate a number of sets of options for their future business activities.

Preservation and use of information are vital for decision making, particularly in the areas of planning and forecasting future business policy and strategy. In this process managerial accounting plays an important role. What led to the final changes in understanding the importance of management accounting is the notion that the company's strategy influences its need for information. Globalization, which began in the 1970s, led to the expansion of existing strategies, along with the internationalization of business and creation the global market. Therefore, managerial accounting gained importance, as a system that provides relevant information for decision making and strategy formation.

With the help of information obtained by management accounting, managers can appraise business outcomes to determine if operations are going according to the previously set plans or whether the achieved results differ greatly from the expectations. If it latter is the case, that may require some adjustment and revision of the plans in accordance with operational activities. Managerial assessment of business outcomes takes into account the effectiveness and efficiency. Successful execution of the task is called effectiveness, while efficiency includes the fulfilling the tasks, with the means employed to reach the best possible results at the lowest possible price. Best

possible performance of the business entails maximum effectiveness and efficiency.

Technology has advanced so much that the company can afford to have different accounting systems for different purposes. Nevertheless, the majority of systems still rely on a unique system of basic information in the field of accounting. This unique system focuses on information needed for financial accounting, but it can be customized to suit most needs of internal management.

A business's accounting system contains information potentially relevant to a wide range of people. In addition to business owners, who rely on accounting data to gauge their enterprise's financial progress, accounting data can communicate relevant information to investors, creditors, managers, and others who interact with the business in question. As a result, accounting is sometimes divided into two distinct subsets—financial accounting and management accounting—that reflect the different information needs of these end users. Financial accounting is a branch of accounting that provides people outside the business—such as investors or loan officers—with qualitative information regarding an enterprise's economic resources, obligations, financial performance, and cash flow. Management accounting, on the other hand, refers to accounting data used by business owners, supervisors, and other employees of a business to gauge their enterprise's health and operating trends.

Accounting's importance as a barometer of business health—past, present, and future—and tool of business navigation is reflected in the words of the American Institute of Certified Public Accountants (AICPA), which defined accounting as a "service activity." Accounting, said the AICPA, is intended "to provide quantitative information, primarily financial in nature, about economic activities that is intended to be useful in making economic decisions—making reasoned choices among alternative courses of action."

This led to the development of international accounting standards and principles. They provide a unification in the presentation of business results of companies and managers.

In each country, local law prescribes the obligation to draw up financial statements. These laws include the accounting standards that are published by legal and professional accounting organizations in the respective country. Before the formation of International Accounting Standards Committee (IAS), there were frequent

differences in form and content of the published accounting standards in most countries.

Working on the adoption of existing standards and the formulation of new international accounting standards, IAS is making them less complex arso that they can be effectively applied all over the world. International accounting standards published by the IAS are constantly reviewed to take into account the current position and the need to update.

The International Accounting Standards Board (IASB) has developed and published a framework for international accounting standards. This framework allows the harmonization of regulations, accounting standards and procedures for presentation of financial statements, thus reducing the number of alternative accounting treatments permitted by International Accounting Standards. Generally accepted accounting principles (GAAP) are the guidelines, rules, and procedures used in recording and reporting accounting information in audited financial statements. Various organizations have influenced the development of modern-day accounting principles.

The development accounting is inextricably linked with the development of the management information system. In the early days of the development of the management information system it was predicted that the overall system approach would lead to the design of a highly integrated management information system. Therefore, the management information system should be considered as a set of information subsystems that use a common database. The common denominator of all subsystems is an objective system as a whole - providing management with the right information, in the right quantities, at the right time and at minimal cost.

According to the system theory approach, an accounting system is a management information system that is responsible for the collection and processing of data useful to decision-makers in planning and controlling the activities of a business organization. The data processing cycle of an accounting system encompasses the total structure of five activities associated with tracking financial information: collection or recording of data; classification of data; processing (including calculating and summarizing) of data; maintenance or storage of results; and reporting of results. The primary—but not sole—means by which these final results are

disseminated to both internal and external users (such as creditors and investors) is the financial statement.

Accounting is, therefore, to be considered as a subsystem of the management information system, because it deals with the process of determining, and communicating economic information about the affairs of a particular business entity, so that information users can make decisions concerning the financial affairs of a given subject. In other words, the accounting can be defined as a financial information system, designed to provide financial information needed by the different range of users.

This analysis of accounting as an information system leads to several important conclusions. First, the principal aim of the system is to provide information that meets the needs of its users. If we can accurately and clearly determine these needs, then we can determine the nature and characteristics of the output of the system.

In recent decades there has been a reduction in trade tariffs, quotas and other barriers to free trade, improving the global transport system and increasing the level of sophistication of products on international markets. These factors together have led to reduced costs of international trade and to further expansion of multinational companies on the potential markets. Cost reductions have been caused by the competitors and in relation to local companies in countries where they operate. What was the relevance of managerial accounting in those circumstances? The answer lies in constant need of multinational companies to reduce costs and thus become competitive on both the international and the world market.

Accounting has also been frequently defined as "the language of business" because it is the basic tool for recording, reporting, and evaluating economic events and transactions that affect business enterprises. Accounting processes document all aspects of a business's financial performance, from payroll costs, capital expenditures, and other obligations to sales revenue and owners' equity.

Accountants select raw data, relevant to its target. Filtering process plays a key role in defining accounting information. This filtering process can be understood as a boundary between the accounting system and its environment: it is a point or a moment when the raw data becomes the input data. The selected data represents the input for a system that creates accounting information. The output

data is used by a group of managers in order to facilitate the process of decision making.

The output or financial statements are the most comprehensive way of communicating financial information about a business enterprise, and a wide array of users—from investors and creditors to budget directors—use the data it contains to guide their actions and business decisions.

It is because of an extensive group of users, and the relevance accounting information has in the developed world, that accounting profession today has reached a status that is comparable to the law or medicine.

In an increasing level of competitiveness, there is an increasing pressure on managers in the decision process in order to maximize the financial performance of the company where they work. In response to these needs, the series of new methods and techniques of management accounting has emerged. For this reason, there was a need to conduct research on the importance of management accounting at U.S. companies.

Such research was conducted in 2003 by The Agency Ernst & Young in collaboration with the Institute of Managerial Accounting (IMA). The main aim is to provide answers to the following questions:

1. Has there been a fundamental change in the role of management accounting?
2. Does the existing methods meet the new needs?
3. If not, what techniques and methods (new or traditional) are deemed necessary to apply?
4. What role do new technologies play in changing the common methodology of managerial accounting?
5. What factors are currently speeding up or slowing down the application of these techniques and methods in organizations?

The study lasted 5 weeks, starting January 2003, and was conducted by electronic means (e-mail), and included 2,000 respondents - members of the Institute of Managerial Accounting, approximately 23,000 respondents. They were divided into two groups. First group consists of: decision makers (31%) - executive directors, financial managers, operations managers and people related financial and accounting departments, and the second group consists of lower levels of management.

Findings:

1) Cost management is crucial for achieving strategic goals. Of the total respondents: 80% said that cost control is of great importance for the overall strategic goals of their companies, while 75% believe that the state of the economy led to an increased need for cost control and transparency of costs;

2) Decision makers and executors of decisions cited the need for "usable" information on costs, as the main priority. Both groups believe that the two main priorities are: to create "usable" information and reduce costs and their causes. There is, however, a difference of opinion among decision-makers and executors. Decision makers believe that the next highest priority is contribution to a basic strategy, and executors believe that the next highest priority is improving the reporting process setting standards of performance for the organization.

3) The majority of respondents do not consider the application of new techniques and methods of managerial accounting in the current economic conditions. In the current environment, new initiatives are not high priority of a company. Major initiatives that companies do apply are new procedures of budget preparation and implementation of ERP (enterprise resource planning with a common information base). The initiatives that were once popular such as reporting on financial consolidation and application of new analytical procedures are found at the bottom of the list. Nearly 80% of all respondents agreed that the application of new methods and techniques of management accounting is not a priority, 72% of respondents use traditional techniques, 14% of respondents use the best known and the remaining 14% use ERP models.

4) Despite the emergence of newspapers, traditional management accounting methods are still widely used. Examples include: quantitative techniques (76%), traditional cost system (76%), the technique of making the operating budget (75%). Modern, non-traditional management accounting techniques are not widely represented, as evidenced by the following research results: the system of target cost (25%), Value Management (25%) and the theory of limit analysis (22%).

6) Managerial support is considered the most important condition for adopting new initiatives. Adequate technology and expertise are crucial. Decision makers require a clear, quantified

proposals for the application of new techniques to comprehend the amount of costs required for their application.

A common characteristic of all forms of accounting is their function, which has not changed since the beginning of accounting-collection and organization of the business operations, and their processing into useful information. Such information becomes the basis of the decision making process of managers. However, two processes have largely influenced the further development of accounting as part of an information system.

The increasing use of computers for business purposes have shortened the processing of information and made them accessible to different management levels. Another process that led to the questioning of the relevance of information in decision-making process is the internationalization of business. For a multinational company, with branches all over the world, it is no longer enough to have timely and accurate information at its disposal. For this reason there was a need for information to be presented in a uniform manner so that management of multinational companies could compare the profitability of different markets.

**Abstract:**

*Management of multinational companies, in order to gain profit, needs to make effective decisions regarding the choice of business practices and strategies to be followed or in which countries should business operations be located.*

*With the help of information obtained by management accounting, managers can appraise business outcomes to determine if operations are going according to the previously set plans or whether the achieved results differ greatly from the expectations. If it latter is the case, that may require some adjustment and revision of the plans in accordance with operational activities.*

*The development accounting is inextricably linked with the development of the management information system. In the early days of the development of the management information system it was predicted that the overall system approach would lead to the design of a highly integrated management information system.*

*Accounting has also been frequently defined as "the language of business" because it is the basic tool for recording, reporting, and evaluating economic events and transactions that affect business*

*enterprises. Accounting processes document all aspects of a business's financial performance, from payroll costs, capital expenditures, and other obligations to sales revenue and owners' equity.*

*Managerial support is considered the most important condition for adopting new initiatives. Adequate technology and expertise are crucial. Decision makers require a clear, quantified proposals for the application of new techniques to comprehend the amount of costs required for their application.*

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## **THE IMPORTANCE OF ECOLOGICAL MANAGEMENT FOR THE TOURISM OF CENTRAL AND SOUTH-EAST EUROPE**

### **Summary**

*Nature has a great importance for tourism. It is the backdrop for many tourism activities and, according to the forecasts, tourism journeys will in the future tend to „green” destinations; so the future belongs to those areas where the nature is still intact and the landscapes clean.*

*All this results in the fact that the strategy key for many undeveloped areas or undeveloped destinations is ecology, so the accent should be put on the development and perfection of sustainable, environmental, ecological management.*

*This strategy is of great importance for the whole world, and especially for the region of Central and South-East Europe.*

*Kay words: Tourism, Sustainability, Ecology, Management*

### **Introduction**

We define management as the process of creation and condition maintenance, where the individuals, working together in the groups efficiently, achieve the chosen goals<sup>85</sup>.

The tourism management is specific – it is performed both, on micro and macro level, that is in the single tourism enterprise, but also in the tourism destination. Generally speaking, the key word between the macro and micro level is coordination – actually the philosophy of competition at the certain level of tourism development has evaluated to the philosophy of coordination – what means finding the mutual interests and solutions for all stakeholders in tourism.

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<sup>85</sup> Zecevic, M; Rilke, B: Menadžment, Beograd, 2003. p. 9

In the connection with even bigger environmental endanger from one side, and the increasing ecological consciousness from the other, in the last period of time in management has ecological responsibility generally increased. And this all is connected with the sustainability as the imperative of today.

### **Sustainability**

The concept of sustainability or sustainable development represents the situation which satisfies the needs of the present, without compromising the possibility for the future generations to satisfy their own needs as well. Conceptually the area of sustainable development could be divided into: **(1)** environmental, **(2)** economic, **(3)** socio-political, and, in the recent time **(4)** cultural sustainability.

In this paper the accent is on the environmental sustainability, as the process which ensures that the current processes of interaction with the surrounding remain in accordance with the idea that everything stays in the same, seminal, natural shape, as much as it is possible.

Namely, “the un-sustainable situation” would be when the natural capital (the sum of natural resources) is being expended quicker than it is able to be renewed. Sustainability requires human activity to use the natural resources in the quantity which is naturally renewable.

Environmental sustainability is closely connected with the ecology and ecological preservation – what is priceless for tourism and management of tourism, which are nowadays of extreme importance.<sup>86</sup>

Namely, when speaking of the ecological preservation – that means in tourism something more and something different than in other economic branches. Because the peace of the untouched nature, fresh air, romantic sandy beaches and crystal clean sea, beautiful glaciers and virginally snowy slopes – all of this is in tourism economically more payable than in the other branches of economy.

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<sup>86</sup> In 2006 four tourism giants – France, Italy, Spain and Austria – earned only from tourism 1.238 billion dollars. In 2010 the number of tourism journeys in the world has increased to 935 million. Enormous power!!!

In other words, environmental awareness and consciousness is in tourism not only welcome, but in some way it is existential necessity.

### **Ecology**

Ecology<sup>87</sup> represents the scientific contemplation of the distribution of vital values (benefits, well-being, flourish of life) and the interaction between organisms and the natural surrounding. The term “ecology” is frequently used in wider sense, in compound terms as social ecology or deep sociology, and in daily speech it is the synonym for the natural environment or environmentalism. And that is why the term “ecological” is frequently used in the meaning of “environmentally acceptable”

The basic and central concept of ecology is that every vital organism has permanent and continuous relation with every other element which creates its environment.

Everything that is surrounding us can be observed as an ecosystem, no matter how big it is. Actually, the whole surface of the earth, with the air above and all living organisms that live there could be considered as one big eco-zone. And depending what is dominating, eco systems could be roughly divided into earthly ecosystems (including forest, steppes, savannas, etc.), aquatic ecosystems (lakes, ponds and rivers) and sea eco-systems.

### **Ecological Crises**

Generally, ecological crises occur when the environment, or the species or the population evaluates in the way which is not in accordance with the perturbations which are involved with the ecosystem, landscape or the survival of the species. The quality of the surrounding can fall down for any reason or the environment can become inappropriate for the survival of the species (or population).

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<sup>87</sup> Ecology (as the science about vital, life surrounding - oikos (home, household) + logos (science) was defined by German biologist Häckel in 1866 as „the comprehensive science about the relation among life organism and the surrounding”. However, the first important work in this area was issued by the Danish botanist Warming, who is considered to be the founder of ecology.

Ecological crises vary according to their length and their diversity. They can last a couple of months, but a few million years as well. They can refer to one species or more of them. Finally, ecological crises can be of local or global character.

And one thing that is mutual to all of them - they should be avoided!

Thanks to the progress in technology and the rapid growth of population, humans have more influence on their environment than any other member of the eco-system. Negative influence mostly – but positive as well!

The negative influence of the human race occurs because of the blindness, because of the fact that humans have some other priority goals, so that they are not capable to see what they have been doing to their surrounding. Humans do not see the whole tragedy and irreparable devastation of their surroundings.

One of the activities, at the first sight completely harmless, but activity that easily can result with the devastation of the surrounding is tourism – an expending economy branch, very lucrative, but very dangerous as well - if one is not being careful! While, without acting actively, without having the appropriate management of tourism it can easily destroy itself.

So we come to the management of tourism as the essential necessity for the appropriate development of tourism, and ecological management in particular, as the imperative for the long term exploitation of the world that is surrounding us.

### **Ecological Management**

According to already given definition of management, ecological management could be defined as the process of creation and condition maintenance, where individuals, working together in groups, efficiently achieve the chosen goals, which include the expressed responsibility for the environment.

The International Standard Organization ISO has developed the system of ecological management, whose basic structure and the principles, according to standards ISO 14001 originate from the management of quality.

ISO 14001 are internationally recognized standards which are used in the whole world and which establish the way on which the system of environmental management is being applied.

The structure of the ISO 14001 standards consists of general requests, environmental policy, planning and control with the corrective measures.

This means that the business aspects, with the influence on the environment, should be identified and certain environmental rules should be applied to them. If this is being done continuously, the company gets the certificate.

EMAS, system of voluntary environmental management, was established in the European Union in 1995. It helps companies to evaluate, manage and promote permanently their influence on the surroundings and the environment. Initially, this system was limited to the industrial companies, but since 2001 it has been applied to all economic sectors, including public and private sector of services.

The last revision of EMAS came into force in January 2010, and it now has more than 4400 member-organizations.

### **The Importance of Nature for Tourism**

The nature is of great value for the tourism. It is the coulisse for many activities in the free time. One can bathe, swim, dive, or surf in rivers, lakes, seas... In the mountains one can drive bicycle, climb the mountain, ski, and walk, pick flowers ... In the woods one can pick mushrooms, walk or watch birds.

The productive function of nature in tourism is based on the quoted attractions.

The untouched nature is the integral part of highly positioned tourism, and in the close future nothing is going to change in this matter. According to the forecasts, tourism journeys will tend towards the „green” destinations, and the future belongs to those areas where the nature is still untouched, and the landscape clean. Accordingly, the tourism sells the nature, and often those free goods are commercialized very dearly – water, air, etc. „Tourism often sells very dearly something that the seller got for free, for instance, extraordinary large number of sunny days, the remarkable mountain scenery, beautiful, long white sandy beach“<sup>88</sup>

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<sup>88</sup> Menzel, C: Die Zeit der Lotus-Esser – von den zweifelhaften Folgen des internationalen Tourismus, 1975.

The consequences of tourism activities could be divided into four categories:<sup>89</sup>

- Mechanical consequences: compaction, upper layer hardening and ground erosion or vegetation destruction;
- Intensive use of the area: abrasion and landscape figuration change;
- Pollution of the air, earth and water: driving beam fuel combustion, evaporation or chemical devices leakage, waste (junk)
- Disturbing factors: noise or stink

The share of tourism in local as well as in the global problems is significant, especially because of the enormous energy consumption necessary for achieving the mobility motivated by the free time (and tourism).

### **Ecological Management in Tourism**

Ecological management in tourism is of very specific significance – environment represents one of the “basic means” of tourism activities. In tourism environment and its preservation are “*sine qua non*” for its existence in general.

Today, at the time of the increased international competition caused by the globalisation and internationalisation, the questions of eco-management are very much connected with the questions of business ethics in the sense of respecting rights and obligations of the organisation towards the people in mutual relations. In the context of the environment, business ethics means taking care about the surrounding and taking care about the ecological demands.

Short term business decisions in tourism could be more lucrative and more profitable, but they are mostly in collision with the ecological demands. Namely, ecology refers to long term view, ecology looks far into the future – ecology means long-term economy. That is the reason for frequently existing conflicts between the two worlds – “pure” economic rationality from one side, and “pure” non-economic morality, from the other.

Ecological management is the one that should appease these two worlds!!!

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<sup>89</sup> Hahn, P: Analyse des Konflikts Umwelt/Sport aus landschaftsplanerischer Sicht, Berlin 1989

In other words, the dimensions of ecological management start with the assumption that in everyday contacts there is the permanent conflict between economic premises and ecological demands. On one side there is: profitability, competition, productivity, economic growth..., and on the other: security of the air quality, quality of water, quality of the ground, noise avoidance, etc.

The system of ecological management is applicable in tourism practice, and can be seen at the example of significant tour operators – Studiosus, TUI, Kuoni ...

For example, as the top tour operator, TUI obliged itself to behave according to the sustainable development principles. In this sense it created its own ecological network TUN - TUI Umwelt Netzwerk.

In the countries where the tourists spend their holidays TUN attempts:

- to contribute to the animal, plants and landscape protection and national and cultural heritage preservation,
- to use sparingly the land, water, energy sources and other natural resources and to avoid waste (junk) and environment pollution wherever it is possible,
- to involve municipalities in tourism planning and to stimulate the use of domestic products and services, and
- to strengthen partners in private companies and public administration services to create sustainable structures and to develop them in the future.

There is one thing that should be kept in mind:

**The nature preservation together with the simultaneous produce of the new value, in spite of all deductions in the form of the “damage making”, should result in the sustainable development.**

### **Ecological Management in Serbia and Surrounding Countries**

Generally, the ecological management is differently developed and differently applied in the countries of Central and South-East Europe.

#### **Serbia**

Looking historically, nature protection in Serbia has a very long tradition. The first written traces are to be found in Dušan Code (Par. 123) in 14<sup>th</sup> century, where the possibility and wood cutting interdiction in Serbian Empire of that time has been defined.

In Serbia of today, there are several national parks important from the tourism point of view and from the ecological point of view, as well. These national parks are **Fruška Gora, Djerdap, Tara, Kopaonik** and **Šar Planina**.

**National Park Fruška Gora**, established in 1960 is rich with vegetation, beautiful deciduous woods and fragments of steppe vegetation, as well as with the important cultural-historical assets.

There are 16 monasteries in this park, originated from the end of 15<sup>th</sup> and the beginning of 16<sup>th</sup> century. Because of their important role in the development and preservation of the culture, literacy and spirituality of Serbian people, Fruška Gora has often been called Serbian Mount Athos.

**National Park Djerdap** was established in 1974. The greatest values of this area are rich deciduous forests, many rare plants and the river Danube which is the habitat of numerous fish species. The most important cultural and tourism value of this National Park is archeological locality Lepenski vir.

**National Park Tara** is the landscape of unbelievable beauty, established in 1981. The greatest values of this park are the woods of special evergreen tree called Pančićeve omorika (pine, spruce). The Park is rich with dark green lakes, which reflect the surrounding woods.

**National Park Kopaonik**, established in the same year as Tara, is covered with so called “Balkan tajga” – the name for certain wood species like spruce, pine trees, maples, beeches, etc. On the cliffs, grow rare plants, such as edelweiss.

**National Park Šar planina**, established in 1986 is also rich with woods, but with glacial lakes, as well.

After signing the Kyoto protocol, in 2007, the accent has been put on the legal regulations, which were supposed to include Serbia in the active struggle for environmental protection.

Today Serbia has good ecological laws, but they are not applied adequately, e.g. the system of polluters punishment is not applied as it should be. In fact, ecological problems and climate changes most people in Serbia still do not experience directly, although it is pointed out that the ecology and environmental protection are the theme number one in the world and the questions of highest priority. Because - respecting the nature *de facto* means respecting ourselves.

### **Montenegro**

Historically, nature protection in this country originates from 1878, when so called “Knjažev zabran” - known as “Branik Kralja Nikole” was established in the area of Biograd mount. This event in the history of nature protection occurred just a few years after the proclamation of the first national park in the world – Yellowstone, in the United States in 1872.

Today there are four national parks in Montenegro, and they are **Durmitor**, **Lovćen** and **Biogradska gora** (Biograd mount), which got this status in 1952, and **Lake Skadar**, which became national park in 1983.

Apart from these national parks, for the tourism of Montenegro of great importance is **Boka Kotorska**, which is, since 1979, under the protection of UNESCO.

The hundred years old nature protection process in Montenegro resulted in the adoption of the Declaration of Ecological State of Montenegro, in Žabljak in 1991. A year later, the Declaration was integrated in the Constitution of Montenegro.

This country fights today in many campaigns for the preservation of its natural beauties, aware of the fact that, with the help of the clean and intact nature, it is the way to attract tourists and develop tourism. For this purpose nongovernmental organisation MOST has been established, which, by respecting the principles of sustainable development as something that the entire future depends on, establishes all its programs on the development and education in

this field. The citizens are included in all processes important for the high-quality and fulfilled life, processes for nature protection and cultural and media presentation of Montenegro, of course together with the sustainable evaluation of priceless natural wealth.

### **Bosna and Hercegovina**

This state has three national parks and two nature parks. National parks are **Sutjeska** (the oldest, established in 1965), **Kozara** (1967) and **Una** (2008), and the nature parks are **Hutovo blato** (which is also the bird reservation) and **Blidinje**, which got its name according to Blidinje Lake.

The last jungle in Europe is situated in the National Park Sutjeska, and the name is **Perućica**. People say that Perućica is one of the last intact arias in Europe, so the duty of all is to preserve it for the generations to come.

### **Croatia**

Croatia of today has eight national parks and eleven nature parks.

The national parks<sup>90</sup> are **Brioni** (pronounced as national park in 1983), **Kornati** (1980), **Krka** (1985), **Mljet** (1960), **Paklenica** (1949), **Plitvička jezera** (1949), **Risnjak** (1953) and **Sjeverni Velebit** (1999).

Croatian natural parks, as the territories of land and / or sea with ecological characteristics of international or national importance, with educational, cultural, historical, and tourism values are: **Biokovo**, **Kopački rit**, **Lonjsko polje**, **Medvednica**, **Papuk**, **Telašćica**, **Velebit**, **Vransko jezero**, **Učka**, **Žumberak-Samoborsko gorje** and **Lastovska ostrva (Lastovo Islands)**.

Generally, Croatia recognizes the importance of tourism, and sees the tidiness of its beaches and the landscapes as the priority. Being situated on the Adriatic Sea, Croatia offers its visitors rich, healthy fish fund safe from the diseases transmitted by water. But the

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<sup>90</sup> According to the Croatian Nature Protection Act from 2005, par. 11: "National parks are extensive, almost unchanged territory of land and / or sea of extraordinary natural values, which implicates one or more preserved or slightly changed ecosystems, and above all the territory is dedicated to the preservation of basic natural values."

heritage still remains – there are still pollutants which poison the air. That is the reason that the entire result of bio-diversity of Croatia is only 14, towards still flabby 34, in the region.

### **Macedonia**

Macedonia has three national parks, and they are: **National Park Mavrovo**, the biggest one, established in 1948. It has about 60 endemic plants species, 140 birds' species and 38 species of mammals. Second is National **Park Galicica**, situated between the two largest Macedonian lakes, Ohrid and Prespan Lake and the third one is **National Park Pelister**, established 1948.

In spite of all efforts of the Ministry of Environmentalism, rudiments of the past in their negative sense are still very present in Macedonia. But there is more and more awareness of the importance of ecology, so there is also hope for “the ecological better tomorrow”

### **Slovenia**

Slovenia has one national park and two regional.

**National Park Triglav**, with its big diversity of eco-system is protected by many laws, among others by the Constitution of the Republic of Slovenia (Par. 71, 72 and 73). The importance of Triglav can be also seen from the fact that it is on the state arms and the flag.

The regional parks are **Kozjansko** and **Skocjanske jame** (caves).

### **Austria**

Austria has six national parks, fascinating and beautiful.

**National Park Neusiedler See**, established in 1993 is at the frontier with Hungary; **Thayatal** at the frontier with the Czech Republic; **Hohe Tauern** is the largest protected area in Central Europe; **Kalkalpen** the largest woods area in Austria; **Gesäuse** is the youngest national park, well-known for the Benedictine Monastery. **National Park Donau-Auen**, situated between Bratislava and Vienna is one of the last reservation of river islands in Central Europe.

Generally, Austria takes care about ecology, by issuing adequate regulations and restrictions, and by developing the conciseness of its citizens. And the important thing is to harmonize ones awareness of the sustainability and ecology importance from one side, with its behaviour from the other.

## **Rumania**

Legally protected zones are in Rumania divided in five categories.

The first category belongs to the scientific reservations, like **Letea woods** and **Karaorman** in Danube Delta, where only scientists are permitted to enter.

Other categories are open for the public, but under the certain conditions. Natural preservations with protected and preserved habitats, such as **Poljana narciza** belong to this group; the third category belongs to natural monuments, actually these are small protected zones where the natural elements with ecological, scientific or natural values are protected. In the fourth category are national parks with the protected representative examples, important for the national bio-geographical area, such as the **Park Retezat**. The fifth categories are natural parks with one main goal - to preserve the natural complexes, which originate by the interaction between human activities and the nature - such as the mountain **Apuseni**.

In the sense of environmentalism, the best position has the national park in the mountains Retezat, which has recently been included in the international network Pan Parks, what means it became the part of European park elite.

## **Hungary**

This country has nine national parks, and they are: **National Park Aggtelek, Balaton, Bükk, Duna-Ipoly, Dunav-Drava; Fertő-Hanság, Hortobagy, Kőrös-Maros and Kiskunság**.

Although it is not the largest<sup>91</sup>, Balaton is for sure the best known national park in Hungary. It was established in 1997 and it represents the unique eco-system of woods, swamps and lakes. Beside the natural assets, Balaton is also rich with historical cities, churches and castles.

Hungary tries to include the standards of sustainability and ecology in its everyday life. But, ecological catastrophes are possible, such as the one from October 2010, when the reservoir in the aluminum factory exploded and poured out 700 thousand cubic meters

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<sup>91</sup> The largest is Aggstelek, established as national park in 1995, with 198.92 square kilometers.

of alkali red mud, containing poisoned metals. Apart from the human victims and a large number of injured, eco-systems of few watercourses were completely damaged, and 40 square miles of the landscape was contaminated.

Although they are possible, ecological catastrophes of this size are, thanks Good, relatively rare.

### **Czech Republic**

Czech Republic has four national parks: **National Park Krokonosci**, established in 1963; **Sumava**, established in 1991, **National Park Bohemian Switzerland**, situated in the German part of the Elbe River valley, upstream from Dresden, established in 2000 and **National Park Podiji** from 1991.

In coordination with the Ministry for Environmental Protection, Czech Republic invests a lot in sustainability and ecology. And how much it succeeds could be seen in the tidiness of its cities, waste recycling, behaviour of its citizens...

### **Slovakia**

Slovakia has many national parks: **National Park Velika Fatra**, established in 2002, while **Mala Fatra** has this status since 1988. This park has numerous tourism attractions, among which dominate the waterfall Sutovski and Djerovi potok (brook), which forms the system of canyons, waterfalls and cascades. Then the **National Park Niske Tatry**, established in 1978, **Muranska planina** (1998), **Pjenini** (1967), **Polonini** (1997), **Slovacki kras** (2002) and **Slovacki raj** (paradise) from 1988.

The oldest national park is **Tatry**, established already in 1949 under the name **TANAP – Tatranski narodni park**. Since 1993 it is on the UNESCO list of protected biospheres.

Slovakia strives for the sustainability in general and for the generally accepted ecological standards which are used in the European Union. For example, when entering the EU, Slovakia made commitment that it will close the second nuclear reactor of Jaslovske Bohunjice, what she actually did, so this block stopped working on 31<sup>st</sup> December 2008. But, due to the danger of the electro-system collapse in autumn 2009, it was considered of breaking the agreement. In other words, although there are efforts in keeping the standards and

environmental preservation, the life sometimes denies what has been agreed.

### **Conclusion**

If it is presumed that the sustainability and the environmentalism are the imperative of today and now and that they will be the imperative tomorrow and in the future, than it is clear that everyone, and literary that everyone has to respect certain principles and standards.

On the global level, in 1999 ESI - *Environmental Sustainability Index* has been published, actually the composite index which was following 21 elements of environmental sustainability, covering the natural resources, former and present level of pollution, environmental management efforts, contributions to the global goods protection, the capability of the society to improve its environmental performances. ESI was in 2006 succeeded by EPI - *Environmental Performance Index*, which represents the method of quantitative and numeric marking of environmental performances of the state policy of a certain state.

In 2010 the Universities of Yale and Columbia ranged 163 countries according to 25 indicators, covering environmental welfare and the vitality of eco-system. Actually, these indicators enable the control of how close or how far is the certain country from the foreseen goals of environmental policy.

The top destination, or the country closest to the present ideal of environmentalism is Island (with 93, 5 points from the possible 100), which got this primate primarily because of the use of renewable energy sources – water and geothermal, as well as because of pollution control. Canada has 66, 4 points, United States 63, 5... The elaborated countries have the points in the range from 74, 5 (Slovakia) and 55, 9 (Bosnia and Herzegovina).<sup>92</sup>

And the last five places belong to Togo (36, 4), Angola (36, 3), Mauritania (33, 7), Central Afrika (33, 3) and Siera Leone (32, 1).

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<sup>92</sup> Slovakia 74,5; Czech Republic 71,6; Hungary 69,1; Croatia 68,7; Rumania 67; Slovenia 65; Macedonia 60,6; Bosna and Hercegovina 55,9

Sustainability, environmentalism, ecology – important ideas and terms of modern world and modern time.

And if we agree that the strategy key for many underdeveloped areas and undeveloped destinations is ecology itself, than the priority of these countries should precisely be the development and improvement of sustainable, environmental, ecological management. That is the only way these countries would be capable to establish that tiny balance between the profit realization and the minimum of the negative environmental influences.

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Prof. Dr. Dragan Nedeljkovic was born on February 19, 1962, in Belgrade. He completed his primary and secondary education in Belgrade, and graduated from the Faculty of Sciences – the Department for the Tourism studies, in Belgrade, in 1986.

At the Faculty of International Management, Belgrade, Prof. Dr. Nedeljkovic successfully defended his master thesis entitled „The roles and functions of managers, with a special emphasis on the decision-making process“ and was awarded the master degree in International Management, in 1997. In 1999 he successfully defended his doctoral thesis at the Faculty of International Management, entitled „The Process of Making and Implementing Decisions – a Comparative Approach“ and was awarded the PhD degree in International Management.

From 1986, Prof. Dr. Dragan Nedeljkovic worked at the Institute for International Management, as a researcher, and as a member of the team he participated in a number of scientific and professional projects. From 1993, Prof. Dr. Nedeljkovic was employed at the Faculty for International Management, as an assistant for the subject The Introduction to the International Management and Business. After receiving the doctoral degree in 1999, he was awarded the title of an assistant professor for the subjects: Management and Managerial Decision Making, and in 2001, the title of an associate professor at the European University – Faculty of European Business and Management. In 2006, he received the title of a full professor in the field of management and business, for the subjects: Management, Managerial Decision Making, International Business and Management, and European Business.

Prof. Dr. Dragan Nedeljkovic is the author and co-author of numerous scientific and professional papers published in domestic and foreign magazines and monographs, of numerous books, and has participated in a number of scientific symposiums at home and abroad.

## **PERSPECTIVES AND DEVELOPMENT OF EUROPEAN BUSINESS**

### **Abstract**

*The term “European business” is recognized and accepted in order to explain the types of business and activities in Europe which have a cross-border character. The “language” of European business is most of all loyal to the open-borders operations and activities in an increasingly integrated European economic area. Different influences of the internal and external environment of the European business point to the scenario of the future changes in European business which encompasses several dimensions: changes in the socio-political context, in which business operations are conducted; the dimension of the management homogenization in Europe; the dimension of the management homogenization in the world. European business is an important factor of the European integration. By strengthening the common vision of management, a powerful integrative mechanism on the European level is created.*

**Key words:** *business, management, Europe, globalization, international business, perspectives, development, business relations, business sectors, multinational companies*

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European business is a term denoting different kinds of business operations and different forms of companies within the European theatre. Family businesses, public companies, business partnerships, multinational and transnational companies are involved in European business if they conduct their activities within one or more European regions. In addition, European business includes all profit-oriented business activities which are conducted in any part of Europe. In other words, the term “European business” is recognized and accepted in order to explain the types of business and activities in Europe which have a cross-border character – which go beyond the national borders – and which are distinct from common domestic

activities. It could be said that the “language” of European business is most of all loyal to the open-borders operations and activities in an increasingly integrated European economic area.

European business is increasingly recognized as an “umbrella” term which covers business operations and activities of all kinds and shapes in Europe. European business is precisely that: business in Europe. In its character it can be international or conducted within a single European market. It can be a small local bakery or an international car company, like Volkswagen with its operations in Germany, Spain and Czech Republic.

Even the constituent parts of Asian and American companies which are located in Europe are an integral part of European business. Apart from this, one of the primary aspects is how European business conducts its operations outside Europe with the aim of achieving strategic positions in international markets. The subject of separate research are new strategies, organization models, approaches to management, led mostly by the interest and needs of transnational operations with the aim of improving the competitiveness and successful management in ‘new’ Europe.

The term ‘new Europe’ itself requires an explanation. While the geographic identity of Europe has changed little, the continent has gained a completely new form since the end of the Cold War, with the emergence of new independent countries and post-Cold War architecture of peace.

New pan-European commercial and business operations, investment flows, in combination with the new European legal regulative and the expansion to new territories, brought radical changes in the social, technological, economic, political and business environment in Europe. A new union of European states was created parallel to the creation of new challenges, opportunities and threats for all actors. These changes have brought about the making of new European business environment.

Nowadays Europe is one of the biggest world markets, in terms of both its territory, population and consumer power, and the development and structure of its economic activities and business.

Although the national economic systems in Europe are fundamentally similar, the size and development level of the national economies are considerably different. The four most developed West European countries (Germany, France, Great Britain and Italy)

account for around three-quarters of the EU gross national product and around 60% of gross national product of the whole Europe. These four countries, if we exclude the Russian Federation, are among the biggest European countries in terms of their population and the size of their territories. On the basis of these indicators, many would conclude that the decisions of “the great four” have a dominant influence in the European Union.

With its large population and developed economy, Spain has a significant influence and its economic development has recorded an outstanding increase since it joined the European Union. Numerous smaller European countries such as Switzerland, Norway, Luxembourg, Sweden, Denmark, the Netherlands, Finland and Austria can also be marked as rich European economies.

Income per capita in these countries is among the highest in European and in global terms, and so is the industry development level which is extremely high. A large number of these countries are characterized by very high levels of the population density, which is the case in Belgium and the Netherlands.

Standard measured by the GNP per capita is lower than the EU average in countries such as Greece, Portugal or the Central European countries. If we take a closer look at the Eurostat indicators, we can see the dominant position of Germany, whose production takes up around a quarter of the EU gross national product. This is not just the indicator of the high living standard for the German citizens, but it also points to the strength, power, and the leading positions of the German companies.

However, some regions in Europe have an extremely low GNP and a relatively high level of unemployment. If we compare the unemployment percentages (Eurostat), we can note a far greater unemployment percentage in the leading EU countries relative to Japan or the USA. The greatest level of unemployment is recorded in the Mediterranean countries: Spain, Italy, France, Greece, and the lowest is in Luxembourg, the Netherlands and Austria. Despite the different levels of unemployment, the European geoeconomic area is characterized by irregular regional development.

The data from the European Commission show that in ten wealthiest EU regions, the GNP is three times higher than in ten poorest ones. Thus, for instance, Hamburg, the richest region in the

European Union, has GNP that is 3.5 times higher than Germany's poorest regions Thüringen and Mecklenburg.

The greatest level of private activities and the richest regions of the EU economy are located in the South-East of England, in the Rhineland, across France, to the North of Italy and Spain. In contrast to these are the regions of the rural parts of Ireland and the Mediterranean countries, such as parts of Greece, Italy, Spain and Portugal.

### ***European Business Environment***

Any environment in which business operations are conducted is subject to a constant change. Modern European business environment is conspicuously fluid, dynamic, and changeable. The character of European business environment at the beginning of the third millennium is primarily marked by rapid changes. In the center of these changes is the increasingly intensive integration or 'Europeanization' of markets and the economic and business structures in Europe. As Nugent and O'Donnell note, "At the heart of this emerging European business environment is a fledgling European economy, in which national economies are increasingly interconnected and interdependent, in which national economic policies and policy approaches are increasingly co-ordinated, and in which the regulatory regime to which business is subject is increasingly European wide."<sup>93</sup> This view of the changes in the European business environment is valid today as it was in the early 1990s. Although we are not far from the making of the Single European Market, the EU countries have developed its character and created attributes of an entirely integrated market. The Single European Market stands at the center of the pan-European economic space and is the main link in the EU which gathers the associate and non-member countries throughout Europe.

Owing to the processes of cross-border corporate integrations, new models of integration and business cooperation, European companies gained a transnational character. The process of Europeanization has gained significance along with the globalization trends in the international business arena.

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<sup>93</sup> Nugent, N. and O'Donnell, R. (eds) (1994) *European Business Environment*, Macmillan, p. 1.

Starting from the role and importance of the European Union in the modern European business environment, we can identify the main features of the European business development:

- The Europeanization of the economic and political decision making;
- The consolidation and development of the Single European Market;
- The continuing process of the monetary unification (and the introduction of the forms of fiscal federalism);
- The making and development of European standards and their adaptation to the international standards;
- The strengthening of the domestic and international competition;
- The intensification and enhancement of the competition, in both industrial and services markets;
- The development of pan-European labour markets;
- The liberalization of the European market and incorporation of other European countries in the EU.

Distinct trends in development are concerned with the European strategic management and focus on:

- the improvement of various new forms of commerce and distribution;
- the quantitative and qualitative expansion of commerce and particularly investments;
- the globalization of markets and the enhancement of the competitive advantage.

All these trends of further development can be classified as external factors in the environment of the “European” business. Therefore, we can single out two levels of the external environment which influence the European business: the immediate environment and the remote environment. The remote environment of the European business comprises different political, technological, legal, economic, socio-cultural influences, and its close external environment consists of human resources, consumers, suppliers and competition.

The changeability of European business environment is best explained by Johnson and Turner, who note possible changes in the

business environment of European companies, and offer three different levels:<sup>94</sup>

- *the national level*, where the creators of business politics are constrained by the European integration processes or by the internationalization of markets;
- *the European level*, where once fragmented markets have become integrated in one whole and where the processes of business and political decision making have become significantly strengthened;
- *the international level*, where infinite possibilities of the global business stimulate the greater international independence and where other actors, beyond the European borders, influence the formulation of the EU politics and business strategy of European companies.

## **THE STRUCTURE OF EUROPEAN BUSINESS**

### ***European Companies***

There are a large number of different forms of business in Europe: small and large, domestic and international. Research points to the analytical framework of three basic variables of European business: size, sectors and ownership. By analyzing these parameters, we can examine different areas of business and business operations and activities in Europe.

Within the European Union there exist a great number of different types of business which differ from each other in terms of their size, structure and impact on the European economy. On the one hand, there are many small and medium-sized enterprises, and on the other hand, there is a much smaller number of very large companies which have an extremely big economic, political, social, and business influence and importance.

Despite the fact that the business in the EU countries is dominated by the private-sector businesses, public-sector organizations and companies can be found in all European countries, in the key areas of economy (for example – in defense, transportation, etc.)

In addition, in European business there are many public organizations, in which the state authorities have full, or majority

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<sup>94</sup> Johnson, D. and Turner, C. (2000) *European Business: Policy Challenges for the New Commercial Environment*, Routledge, p. 1.

ownership, but also thousands of private-sector businesses in which the state authorities have some influence or a minority share. Governments often retain non-controlling shares in private or privatized firms and increasingly often they support their influence through investments or the influence in particular sectors of industry.<sup>95</sup>

The last decade in Europe has been marked by dramatic changes in the control function of public companies. While the Central and East European economies have been engaged in wholesale privatization, as part of the transition process, the governments of the EU member countries continued the privatization of the state-owned companies. In the early 1990s approximately 15% of economic activities in the European Union were conducted by the state-owned companies. That figure is now reduced to approximately 10%. Between 1985-1995, France privatized \$38 billion worth of public property. In late 1990s, the French government sold public companies such as France Telecom and Air France, whereas Great Britain sold British Airways and British Petroleum. While France, Spain, Italy, Portugal, Germany and Austria have retained a considerable share in a number of privatized companies, numerous companies in which the state had the majority share were wholly privatized.

In the strongest European business sectors: banking and insurance, chemical, pharmaceutical, electronic industries, telecommunications, food and beverages industry, metal industry, as well as motor, transport and tourism industry, great European multinational companies enjoy the reputation of the worldwide recognized companies with high competitive advantages. In global industries, and particularly in these sectors, 10 top largest and most successful European multinational corporations have emerged. On the global list of the top 200 companies, based on the global revenue, there are 67 European corporations, 23 from Germany, 19 from France and 14 from Great Britain. This information alone is sufficient to show the global picture of the strength, power and influence of European business.

The comparison of the best European companies is extremely complex owing to the various measures which are used, among which

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<sup>95</sup> Worthing I., Britton C., *Business Environment*, Pitman, 1997.

are: sales revenue, profitability, the number of employees... Some of these parameters are the indicators on which the ranking of European multinationals is based.

Tables 1 and 2 are based on two different parameters, which are used to present the list of top 10 European multinational companies.

Rank (global)	Company	Nationality	Revenue (\$ million)	Industry
1 (5)	Daimler-Chrysler	GER	159,986	Motor vehicles & parts
2 (11)	Royal Dutch/Shell Group	UK/NED	105,366	Petroleum
3 (15)	Axa	FRA	87,645	Insurance
4 (17)	BP Amoco	UK	83,566	Petroleum
5 (19)	Volkswagen	GER	80,072	Motor vehicles & parts
6 (21)	Siemens	GER	75,337	Elect./eng.
7 (22)	Allianz	GER	74,178	Insurance
8 (27)	ING Group	NED	62,492	Insurance
9 (31)	Deutsche Bank	GER	58,585	Banking
10 (35)	Assicurazioni Generali	ITA	53,723	Insurance

Source: Fortune Magazine

Figure 1: top 10 European companies, by global revenue (2000)

Rank (global)	Company	Nationality	Employees	Industry
1 (8)	Daimler-Chrysler	GER	466,938	Motor vehicles & parts
2 (9)	Siemens	GER	443,000	Elect./eng.
3 (12)	AO Gazprom	RUS	368,900	Energy
4 (19)	Volkswagen	GER	306,275	Motor vehicles & parts
5 (20)	La Poste	FRA	306,000	Mail
6 (22)	Carrefour	FRA	297,290	Retail
7 (22)	Vivendi	FRA	275,000	Engineering & construction
8 (26)	Sodexo Alliance	FRA	269,973	Food & personal care
9 (27)	Deutsche Post	GER	264,424	Mail
10 (29)	Unilever	UK/NED	255,000	Food & personal care

Source: Fortune Magazine

Figure 2: top 10 European companies, by the number of employees

As parameters, Table 1 uses global revenue, whereas Table 2 ranks European multinational companies by the number of employees. Both rankings look different since different parameters are used.

It is important to emphasize that after the decade of primacy of Japanese and East Asian rivals in the high technology areas, such as the information technology, the hardware sector and the sector of telecommunication services, Europe has its champions on the global market, and the examples are Nokia, the Vodafone Group, etc. The profiles of 200 biggest world corporations shows that a number of European companies have an extremely strong competitive position in the global business. Some of the European companies which are ranked on the global list of top 20 world companies, as well as those which are not on this list, such as Daimler-Chrysler, Royal Dutch Shell, British Petroleum, BMW, Deutsche Bank, L'Oreal, SAP and Nokia are among the European companies which enjoy the greatest reputation around the world. These companies are characterized most of all by the strong management, effective leadership, good quality of products and services and effective global activities.

### ***Business sectors in Europe***

In the EU countries, the service sector comprises 68% of gross national product and 66% of employees are engaged in the service sector companies. According to the EUROSTAT data, the service sector is the home of a large number of European companies. It comprises 5.5 million companies from the retail, commerce and distribution sectors, plus 1.3 million of them from the hotel and restaurant sector („Horeca“).

Table 3 shows that the distribution sector comprises one-third of all EU companies. It also shows that around one million enterprises are involved in transport and communication services in the European Union and around two million of them in other business services. These are companies involved in fields such as management consulting, computer and technical services, personnel training, advertising... Evidently, this sector is growing and developing rapidly. In addition, this table show that the European economy encompasses 11,3% of non-agricultural enterprises.

	Enterprises		Employment		Turnover		Employment share of SMEs
	Thousands	%	Million	%	ECU billions	%	%
Industry and energy	2,043	11.3	33.24	29.7	4,454	26.0	52.6
Construction	2,408	13.3	10.14	9.1	905	5.3	87.7
Trade	6,804	37.7	29.82	26.7	4,787	28.0	78.8
Transport and communication	930	5.2	8.16	7.3	715	4.2	46.6
Financial intermediation	326	1.8	4.70	4.2	4,347	25.4	28.3
Other business activities	2,062	11.4	10.25	9.2	795	4.6	68.9
Other services	3,477	19.3	15.46	13.8	1,107	6.5	73.2
Total	18,050	100.0	111.76	100.0	17,109	100.0	65.7

Figure 3: EU companies by sector of activities

The European economy can be said to have become predominantly service- and postindustrial-oriented economy. This is confirmed by the fact that the areas of service industry in West Europe employ around two-thirds of the total number of employees. European service economy comprises two elements: market and non-market services (such as, public administration, government, health and education). Most market-oriented services are in the areas of banking, insurance, distribution, transport, communications and business services.

The OECD Labour Force Statistics show the level of employment in European countries, in the areas of agriculture, forestry and fisheries (5%), industry (manufacture, energy, construction) (29%) and the service sector (65.2%). As an example, the northern members of the European Union have a greater share of employees in the service sector (over 70%). At the other end of the scale are Greece and Portugal, with around 60% of employees in the service sector.

The data show that trends in Europe support the hypothesis on the development of activities in the private sector towards the progress of the tertiary sector. Trends in Europe also show that knowledge is gaining a greater significance as a product, especially in the areas of IT, software development and biotechnology. Here we can also mention the media, telecommunication, medicine, financial services, and public administration. In these areas, an effective use and management of information is the key to success of the European companies.

***European business relations: the EU, Japan, the USA***

The US and Japan can be marked as the biggest and greatest business partners of the European Union. The business relations with these countries are among the most important goals of the EU foreign policy.

The idea of the 'new transatlantic market' has dominated the relations between the European Union and the USA. Among other things, this plan envisions the elimination of the mutual industrial tariffs starting from 2010 and the establishment of free trade between the EU and the USA in the service sector. The 'New Transatlantic Market' plan is being carried out under the auspices of Transnational Economic Partnership, signed between the European Union and the US in London in May, 1998.

Historically, the relations between Japan and the EU have been burdened by certain difficulties. Irregular balance of commerce to the benefit of Japan causes some tension, so the European companies seeking to export to Japan are confronted with a number of obstacles.

World business today is dominated by three main markets, Japan, the USA and the European Union; each is a dominant regional force and this can be designated as a 'triad'.<sup>96</sup> This line of thought is supported by the fact that Japan, the USA and the European Union together account for 47% of the world export and three-quarters of direct foreign investment. In 1997, 50.5% of direct investments was carried out in the 'triad' countries, and they accounted for 75.5% of all external direct investment in the world economy.

Over 75% of the production and sales in the areas of car, chemical, petrochemical, steel and other important industry sectors is concentrated within the triad. Thus, there is no doubt that their businesses dominate the world economy.

A characteristic of the 'triad' is also a high level of commerce and investments which are made within and across the 'triad' countries. Table 4 shows the commerce flows within the 'triad'. The USA display a trade deficit in relation to both the EU and Japan. While the EU has a small trade surplus in trading with the USA, we can notice a deficit in relation to Japan.

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<sup>96</sup> Ohmae K., „Managing in Borderless World,“ *Harvard Business Review*, May-June, 1989.

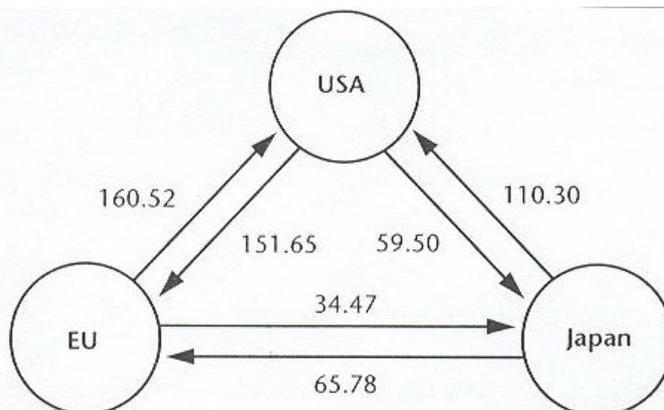


Figure 4 Trade flows within the 'triad' (in mill. of euros)  
Source: EUROSTAT – comext, UN comtrade

The data from the Table 4 give a more detailed display of the investment flows between the EU and the USA, which amount to € 500 billion. These are the largest mutual investment relations in the world. The US entry investments to the EU amount to € 210 billion. The key US investors in the European market are: Ford, General Motors, IBM, Hewlett-Packard. Traditionally, a greater number of these companies' investment activities has been concentrated in a small number of European countries: France, Germany, the Netherlands, Great Britain.

European companies are the first on the list of all international investors in 41 state of the US, and the second in the remaining 9. The EU investments in the US are evaluated to around € 298 billion and are continually growing.

Although the Japanese investments in Europe are considerably lower in comparison to the US (Japan accounts for only 7% of total investments in the EU), this level is constantly growing. Despite the external barriers, the Japanese companies such as Sony and Hitachi have started their production operations in the EU. In 1993, the Japanese investments in the European Union amounted to € 20 million. In late 1996, they increased to € 31.9 billion and are still increasing.

Although the Japanese investments have been considered 'controversial' (the fear of the unknown, owing to the possible troubles for the domestic producers in Europe), they are generally

welcomed. Direct foreign investments create new jobs, increase the capital market and the production capacities of the host country and bring them a greater revenue from taxes. The areas of greater unemployment, and the industries which were on the decline, have flourished with the inflow of Japanese investments. This is the case with some regions in Great Britain, such as parts of the North East or Wales, which have experienced great benefits from the main investment projects. Therefore, for instance, a Nissan factory or Toyota have provided direct or indirect possibilities of employment in two British regions. This explains the fact that the British not only appreciate the Japanese investments, but actively support them.

***The perspectives of the development of the European business***

Different influences of the internal and external environment of the European business point to the scenario of the future changes in European business which encompasses several dimensions:

1. Changes in the socio-political context, in which business operations are conducted
2. The dimension of the management homogenization in Europe
3. The dimension of the management homogenization in the world.

The changes in the socio-economic context include: the lowering of the government and trade union influences, harmonization of educational systems, harmonization of legislative systems, East European influences.

The dimension of the management and business homogenization in Europe means, most of all, the possibility of “mutual respect”, tolerance and adopting the best characteristics from “each corporate culture” or management system, which leads to the greater degree of the European business harmonization. The tendency towards “mutual respect” is developed among European companies, and also among the companies from all three management models: the US, Japanese, and European model.

Edgar Morin argues that diversity is the main characteristic of Europe, but also its main original feature and he offers several definitions of the European environment:

‘Everything that simplifies Europe with idealization, abstraction or reduction, mutilates it.’

‘To assemble is to bring together the widest range of diversities...’

‘Combine contrasts so that they are inseparable.’

‘The European Gordian knot, a pluralistic and contradictory unity.’<sup>97</sup>

Europe is characterized by diversity, but it is the diversity allowed in the times of political, social, and spiritual unity: the Roman Empire, the Christian Middle Ages, the Enlightenment, and the current European integration. These times of relative unity have left trace in the collective memory of the Europeans. They remind us that despite the differences, there are common values and the common European civilization.

A positive aspect of the European diversity is the adoption of a tolerant attitude towards the differences. Ethnic and linguistic differences, the mosaic of countries, regions and cultures, borders that are open, and yet exist everywhere, constitute the European environment which enabled the European companies to pursue a “course” of development, expansion, and gaining an international dimension in business.

European business is an important factor of the European integration. By strengthening the common vision of management, a powerful integrative mechanism on the European level is created. However, European business is not a “replacement” for individual national models. It would be unrealistic to expect the management practices to be completely homogenized within the European integration. In the past, the view of the universal management model was a predominant one. Nevertheless, the practice has shown that culture is stronger than method. However reasonable and sensible it is to believe that management methods are universal, it is equally necessary to emphasize that the management style largely depends on the culture and society of the given country. Each civilization has its own way of organizing the power – authority relations among the individuals.

The harmonization of management philosophies and practices, and the harmonization of the socio-political culture (on which the

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<sup>97</sup> Morin Edgar, *Penser l’Europe*, Gallimard, Paris, 1997.

management and business practice is based) are significant factors of development of European business. The key question is not whether European business will be better or worse than other models. The point is that it has to be better adjusted to European values, European attitudes, European culture and to create a greater cohesion in competitive strategies of European companies.

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## **CHALLENGES OF MODERN MANAGEMENT**

### **Abstract**

*It is known that only challenges of modern management are coming. Business tools used in the past to address what challenges bring do not guarantee that they will help us today. Many things are changing. Thus, the past must be forgotten. Do you remember a TV with cathode ray tubes, or you already use plasma TV sets, LCD and LED? Too many people in modern business do not understand what business challenges are, and in particular how to resist them. Therefore, the key method for modern management to cope with these challenges is not to fight against them, but to impose the present to the past and to become a part of those challenges. New business challenges serve to degrade management experience. Modern management should develop a proactive strategic focus, to define a strategy as a long term activity, which has a target destination, and means to achieve it. Our plans miscarry because they have no aim. When a man does not know what harbour he is making for, no wind is the right wind – the thought of philosopher Seneca is appropriate in this context. Today, in the era of globalisation, there is no company which is sure where its market will be and whether it will make a profit and that is the most important business criterion. The real challenge of modern management is to determine: a) the general direction which should be followed, starting from the optimally determined goal and strategy, which recognize what a company should be in a time perspective business focus, and b) the optimal degree of objective and strategy flexibility, which enable successful business manoeuvre in changed market conditions. The given challenge implies the recognition that modern business flows leave the industrial era and they transfer into the era of knowledge, which requires the restoration of a system in which professionalism co-exists in carrying out working operations, in accordance with the standards and business rules, on the one hand, and freedom of employees in terms of achieving their own initiative, invention and innovation, on the other.*

*The real response to the challenge of modern management must take the form of strategic flexibility (by taking evolutionary business steps), that is operational business excellence, i.e. efficiency and effectiveness. Modern management can secure survival, the relief of survival and progress, only if it faces, meets their strengths and offers optimal solutions in terms of challenges in the field of social responsibility and business ethics of business companies, in the field of innovation, in the field of sales and sales management, and in the field of globalization.*

### **Key words**

*Modern Management; Strategic Relations; Challenges.*

## 1. INTRODUCTION

Challenges motivate. “When you meet a man worth speaking to and fail to speak, you have lost the man. When you meet a man unworthy of speaking to, but you do, you have lost the words. Wise man loses neither man nor words.” (Confucius)

Challenges sanction. “If you see a bandwagon, it's too late.” (James Goldsmith)

Modern business world is a dynamic one. Business flows which are internally sized (within a company), or externally sized (within *the market area*) are subject to change in time. Their change determines the need for reviewing and redefining (*micro* aspect) and ensuring continual monitoring of market processes (*macro* aspect), and therefore establishing the continuity of *intelligent handling*, in which is the validity of the *strategic approach*.

Modern management in the business environment of the new millennium should reflect on the business future, because the *rest* of the business life is spent there. Reflection is the value of future proaction, reaching business challenges – the value of the power of the present business approach, and introducing a new, strategic approach, in accordance with the intensity of the challenge. Business challenges require management that is consistently "close enough", the management of intelligent dimensions which *knows why, knows how, knows where, knows when*, and knows what.

Challenges, in other words, stimulate intellectual sphere of management, and equally stimulate its empirical sphere. Given spheres are strategic: they channel future management investments on a competitive basis, by focusing on the definition of critical points to create new added value, and projecting, at the same time, business responses as real segments of business success; they also create chances to assign new roles to the *existing* and *new* people in departments, agencies and sectors of a company, the roles which have a result in freedom of action supported by increased responsibility and a higher degree of business responsibility. Strategic sum of challenge value determines continuity of business reconsideration by entering into the dimensions of competitiveness, presented in the form of: *costs* (because prices never lose their strategic tools); *products quality and process quality; speed and reliability of delivery; production of correct responses to increase or decrease in demand; development*

*and timely introduction of new products* and, consequently adjusting existing manufacturing processes with new, required varieties of products and the like. Modern management separates strategy as the *sui generis* instrument. Only strategy can make the financial year effective and competitive. Competitiveness, as a force which lasts, can only stand out as the powerful strategy, competent in all its components, and, if spoken with exaggeration, built as a myth - the way of interpretation assumed and actual values, sustainable over time, as opposed to the success which is a time-limited category.

Thought-out strategy of modern management causes active business stabilization, which on the one hand prevents short-term problems to become long-term, and on the other to remain open for all future events which, potentially, can provide a more complete understanding of the challenges that influence the outcomes of today's business environment.

## **2. MODERN MANAGEMENT STRATEGIC RELATIONSHIPS**

Modern management, as a discipline of sustainable and prosperous business development, is designed as a process which combines three relevant related activities concerning formulation, evaluation and implementation of *strategy*, which target outcome focuses on *the production* of qualitative responses (what should be done and how) to the challenges of the new business environment paradigm. It is not enough merely to recognize challenges, but the essence is to put them into the fold of company opportunities, to tackle them and make profit out of them. For these enterprises management has to possess optimal high goals that include: the creation and maintenance of key competencies, the development of human capital, creation and maintenance of strong organizational culture, supporting ethnics and good business decisions and establishing an appropriate, balanced control system.

At one time, during the 1970s, McDonald's top management failed to do this, although it recognized tendencies of the time not to eat red meat and fatty food. Top management still has only been concentrated on hamburgers and frying potatoes in animal fat. Similar to the previous example is the one of three major US car manufactures aware of the fact that the American public needed cars with lower consumption rate /as a rule, the consumption on 100km (62ml)/, but

they continued to manufacture cars which, with their high power (cubic capacity), spent enormous fuel amounts.

We note that managers were well aware of the changes that were happening, but they failed to actively respond to them. They responded to changes only when the competition forced them to do so. Increasing competition of Wendy's and other restaurants which offered so called healthy food, finally forced McDonald's to respond to growing consumer orientation toward the health. Also, the competition of foreign commercial companies made American car manufacturers respond to consumers' needs. Stated companies were slow to react to changes, but there are many examples of companies that used economic, social, political and technological changes in a positive way. For example, the company Starbucks, which processes and packs coffee; the world's largest manufacturer of electronic products Sony; and the Gateway Computer Company, the manufacturer of inexpensive high quality computer equipment – succeeded by applying an active attitude towards market changes. The challenges will continue to be multiplied with a steady pace. The last two decades of the 20<sup>th</sup> century and the first decade of the 21<sup>st</sup> century are known as "the decades of full business engagement and dramatic social changes."

But many business experts and futurists believe that the challenges that took place in these periods, will only be the shadow of challenges brought by the second decade of the 21<sup>st</sup> century, and whose emergence is connected with the information revolution, technology, globalization [1, page 49] and organizational learning – we dare to present it as *the only sustainable competitive advantage*.

Key features of a company "which is learning" are: to learn continuously, openly and in cooperation with others, to evaluate the way in which knowledge is acquired as much as the knowledge itself; to invest in keeping abreast of all developments within its industry; to learn faster and smarter than its competitors; to reward learning "on the basis of failure" /drawing conclusions from what goes wrong/ and learning "based on the success" /drawing conclusions from what goes well/; to take the risk but do not to threaten the basic safety of the company, to encourage company members to share information with others, to develop and express an organizational culture that promotes learning, and to apply the acquired knowledge while developing and implementing strategies. [1, page 65]

On the basis of their content they determine: a) implications in the form of constant changes, decreased need for physical assets, overcoming spatial and temporal limits and risk exposure; and, *critical success factors* in the form of the ability to readily accept change, ability for creativity and innovation and the need for companies to be *world class* (or companies where strategic decision makers take the necessary measures to assist it to become the world leader in its field).

<b>Table 1 – Strategic principles of modern management</b>		
<b>PRINCIPLES</b>	<b>APPLICATION</b>	<b>GOALS</b>
<b>Standardization</b>	<i>Minimizing deviations from the standard output, inputs and work methods.</i>	Maintain economies of scale, high production performance, reliability and quality.
<b>Specialization</b>	<i>Grouping of analogue activities and functions in modular organizational units.</i>	Reducing complexity in business and generating the learning process.
<b>Goals Leveling</b>	<i>Establishing the basic and sub-goals</i>	Ensuring harmony of individual and goals of senior business units - working groups, working teams, organizational units.
<b>Hierarchy</b>	<i>Creating a pyramid of authority based on a limited range of control</i>	Maintaining coordination and control of a wide scope of operations.
<b>Planning and Control</b>	<i>Demand forecasting, planning costs of resources, organization of work tasks; corrective measures.</i>	Establishing continuity and predictability of business operations, acting in accordance with the planning settings
<b>Employees Remuneration</b>	<i>Providing financial and other types of awards to individuals, work groups and work teams for achieved positive operating results.</i>	Motivating employees and keeping their work posts at the level of adopted business standard policies.

Key features of a company at the global level include: strong focus on customers, continuous improvement, flexible organizational structure, creative human resource management, sense of equality, and significant technological support. [1, page 59] Companies can no longer be *the winners* only by support of *low cost* and *high performance quality* of their products, but they must, in order to maintain the business level, equally maintain both. This is, with the application of strategic principles (Table 1), *sui generis* performance of modern management. [3, page 151]

By using the meanings of the four quadrants of the SWOT matrix (Strengths, Weaknesses, Opportunities and Threats) *the relevance of modern management* in the context of the cognition of the internal and external environment challenges (which may be *small and large*) can be put in relation with *the performance of key management functions* in the context of designing high quality responses to given challenges (which may be *low and high*) and thus realize the level of characteristic values of a business management company in the given economic frameworks. (Figure 1)

**Figure 1 – Value features of modern management**

<b>PERFORMANCES OF KEY MANAGEMENT FUNCTIONS</b>	<i>High</i>	<b>STRENGTHS</b> (1)	<b>OPPORTUNITIES</b> (2)
	<i>Low</i>	<b>WEAKNESSES</b> (3)	<b>THREATS</b> (4)
		<i>Small</i>	<i>Large</i>
		<b>MODERN MANAGEMENT RELEVANCY</b>	

If the modern management relevancy is *small* and performances of key management features *high*, the value features of management are in the **strengths** zone.

If the modern management relevancy is *large*, and performances of key management functions are *high*, the value features of management are in the **opportunities** zone.

If the modern management relevancy is *small*, and performances of key management functions low, value management features are located in the **weaknesses** zone.

If the modern management relevancy is *high*, and performances of key management functions are *low*, the value features of management are in the **threats** zone.

Features of the key management functions (planning, organizing, managing, monitoring and evaluation) are in correspondence with modern management goals that have been set, and which are linked, in the given constellation, to the challenges of internal and external environment. Therefore, modern management has to take actions of constant comparison between accomplished features (results) of key management functions and the planned objectives. There are two business categories occurring as measures of these relationships, indicating to a business success or failure: efficiency and effectiveness. [6, p. 102] (Figure 2)

The assessment of key management function features reveals intrinsic and extrinsic approaches to work while solving business challenges. That is why it represents the support for creating a management team whose members need to work intensively on a particular, common *management goal*, in terms of commitment to the issue of finding quality answers to these business challenges, by using their positive synergy, individual and collective responsibility and additional skills.

Readiness of modern management to invest the maximum of its available resources to adequately address the business challenges has become a business imperative. Solving business challenges requires top management total commitment to this process, the one that will result in high value performances. Business development has never rested on utopian dreams, but on a long 'march' through the development of all phases of business processes shaped by the measure of optimal operating procedures. Business challenges are permanently surprising us by new issues and problems, thereby generating a particular resistance to changes that they bring. Positive theoretical considerations in this area suggest the application of the *six* types of methods (approaches) to overcome resistance to changes

caused by the challenges of internal and external environment. [5, page: 370] (Table 2a and Table 2b)

**Figure 2 – Efficiency and effectiveness as products of relation of modern management goal achievement and performances of key management functions**

		PERFORMANCES OF KEY MANAGEMENT FUNCTIONS	
		<i>Low</i>	<i>High</i>
<b>ACHIVING GOALS OF MODERN MANAGEMENT</b>	<i>Good</i>	<p><b>EFFECTIVE but INEFFICIENT</b></p> <p>The goals of modern management are achieved; <i>performances</i> of key management functions did not contain qualitative characteristics.</p>	<p><b>EFFECTIVE and EFFICIENT</b></p> <p>The goals of modern management <i>are</i> achieved; the <i>performances</i> of key management functions contain qualitative characteristics.</p>
	<i>Bad</i>	<p>Not <b>EFFECTIVE</b> nor <b>EFFICIENT</b></p> <p>The <i>goals</i> of modern management are not achieved; the <i>performances</i> of key management functions did not contain qualitative characteristics.</p>	<p><b>EFFICIENT but UNEFFECTIVE</b></p> <p><i>The goals</i> of modern management are not achieved; the <i>performances</i> of key management activities contained qualitative characteristics</p>

<p>Table 2a                      Methods for overcoming resistance to change                      (Description of method content &amp; situation)</p>		
Method name /approach name/	Description of method content	Situation as the destination of method application
<b>Education and Communication</b>	Explaining the need and logic of proposed change to individuals and work groups / teams/.	<i>Lack and inaccuracy of information and analysis.</i>
<b>Participation and Inclusion</b>	<i>Seeking help from individuals and working group's /teams/ in the process of design process.</i>	<i>Lack of information on changes initiators</i>
<b>Help and Support</b>	<i>Providing emotional support to individuals and working groups /teams / affected by proposed changes.</i>	<i>Employees who made a stand because business problems are not solved.</i>
<b>Bargaining to Acceptance</b>	<i>Negotiation with potential agents of the resistance on a reasonable, human basis.</i>	<i>Individuals (groups, teams) who, despite the power, fear that the proposed changes will cause a great loss.</i>
<b>Manipulation and co-optation</b>	<i>Assigning the desired roles to key individuals in the designing and implementation of change process.</i>	<i>The lack of alternative tactics, that is the existence of inadequate tactic or tactics that are too expensive.</i>
<b>Explicit and implicit coercion</b>	<i>Threats of job loss, moving to another job, the lack of improvement.</i>	<i>The urgency of business problems solving.</i>

Table 2b Methods for overcoming resistance to change (Methods Advantages & Disadvantages)		
Method name /approach name/	<b>Methods Advantages</b>	<b>Methods Disadvantages</b>
<b>Education and Communication</b>	<i>Employees consent to the changes accelerates their full realization.</i>	<i>Realization of content method takes a long time if too many people are involved.</i>
<b>Participation and Inclusion</b>	<i>Employees who participate commit themselves to support the implementation of the proposed changes.</i>	<i>Realization of content method takes a long time if participants propose inappropriate changes.</i>
<b>Help and Support</b>	<i>No other method is adequate to address the demonstrated changes.</i>	<i>Realization of content method takes a long time and therefore causes high cost, and it can be unsuccessful.</i>
<b>Bargaining to Acceptance</b>	<i>A simple way to avoid the main resistance.</i>	<i>The method can be very expensive if encouraged to negotiation to full compliance.</i>
<b>Manipulation and co-optation</b>	<i>Relatively efficient and cost-effective solution for overcoming resistance.</i>	<i>Problems can occur in the future if employees feel manipulated.</i>
<b>Explicit and implicit coercion</b>	<i>Very fast method to overcome every kind of resistance.</i>	<i>The method can be very risky if it causes anger with employees, directed against the initiator of change.</i>

Therefore, modern management strategic relationships indicate the permanent tendency of a company management structures, supported by strategies for future development or utilization of resources, their distinctive abilities or essential competences of

various departments, to gain competitive advantage, i.e. to concentrate on providing contribution to effective solution of the existing and potential business challenges. To focus on providing these types of contributions is the key to the effectiveness of modern management in its own business actions and in relations with others, first of all with its business partners.

### **3. CHALLENGES RELATED TO SOCIAL RESPONSIBILITY AND BUSINESS ETHICS OF COMPANIES**

Companies are, by the rule, socially responsible business entities whose business or professional conduct must essentially be supported by ethical standards.

Social responsibility is the obligation of a company, i.e. all its units, to adopt and implement business decisions in a manner which recognizes their interdependence with the social environment.

In other words, company management has to be *socially aware*, that is, to comply with social obligations, e.g. when it comes to environmental protection, employment of minorities, gender equality, public presentation of its business activity results, involvement in certain social problems that are, as such, removed from the areas of corporate activity, etc. A company must apply the law, as clearly as possible, to define the practices that are illegal, anti-social or anti-competitive. It must ensure that all employees know and obey the current laws in the business domain.

Today, companies communicate with many stakeholders that have a wide range of needs and conflicting expectations. This premise shows the challenge of social responsibility of a company in the context of its current and future professional conduct. Stakeholders are individuals or groups with an adequate share in a company. According to the above mentioned, management decisions can significantly influence them, but they may also affect the existing and potential way of adoption and implementation of business decisions.

The challenge is how to adopt a strategic approach in a given constellation, the approach that will emphasize the desire to create a stable and socially responsible relationship with stakeholders; this approach makes a company socially responsible in a broader, social milieu, and the competitive one, because it bases its business on higher social responsibility, i.e. abiding legal and social regulations.

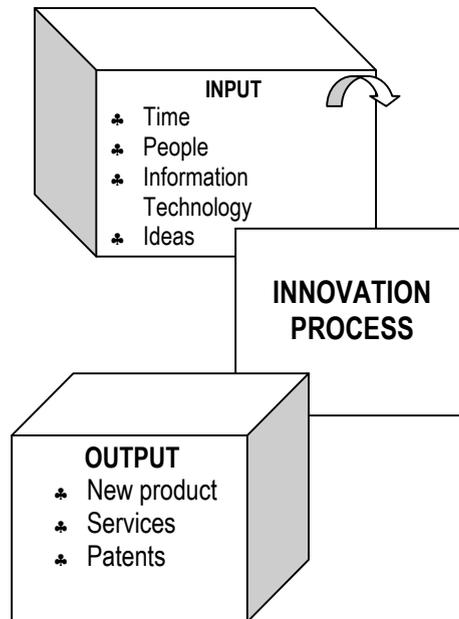
In other words, the company must apply the law to define, as clearly as possible, those practices that are illegal, anti-social or anti-competitive. It must ensure that all employees know and obey the business laws.

Social responsibility of a company provides a wider picture of social interactions among companies, each permeated with ethical principles. Changed roles of employees and the importance of their knowledge and creativity for the development of the company is the main factor that imposes the necessity of managers' ethical-based behavior to employees. The company must adopt and allow the examination of written ethical rules, build the tradition of ethical behavior into the company and impose responsibility to its management team to monitor ethical and legal guidelines; ethics is the set of rules and principles that define right and wrong business behavior.

#### **4. CHALLENGES RELATED TO INNOVATIONS**

*Innovations* (a transformation of creative ideas into a tangible product or process that can be used or sold) are critical factors of success for every company seeking to gain competitive advantage in the new business environment. They correspond to changes that occur due to continuous technological advancement, the exposure of resources to risk requirements and uncertainty and availability of information. The innovation consists of three components: *innovation incentives* (which are the result of an innovative approach to leadership, human resource management, knowledge management and creative management); *innovation capacity* (which is created and maintained by technology management and management of research and development); and *innovation performance* (which occurs in the form of the product innovation and the process innovation). [7, page 81] Innovation process is, by its nature, a practical operating process. [7, page: 134] (Figure 3)

**Figure 3 – Innovation as an operating process**



Modern management has to combine its business concept with the capacity of human factor: a) continuously to introduce and monitor the implementation of changes, on the one hand, and b) focus its creativity on achieving optimal current and future business performances, on the other; because, as it was put by Marcus Aurelius Antonio, *“Time is like a river of passing events, and its current is strong; no sooner is a thing brought to sight than it is swept by and another which takes its place, and this one will be swept away as well.”* The challenges of modern management related to innovations refer to primary instigators of innovations: *consumers, employee diversification (diversity), coordination of relationships and relations between business companies that are mutually supportive and technology.*

**Consumers.** End consumers are more numerous and older in the contemporary business environment; the highest percentage of them live in urban centers. These parameters are the basis for creating a series of innovations that will serve their explicit and implicit needs.

Markets that provide consumers with goods and services have become global, and they affect all spheres of activities. This dispersion is a cause of different consumer demands, which indicates the need of companies to "design in favor of culture" by taking steps to ensure that their products fully meet local needs. Furthermore, in the given circumstances, they continuously construct *business models* that are nothing but a strategic form of making profit by applying a broad set of their strategies, processes and activities. It is precisely the business model that can, in a simple way, support modern management by responding to four questions: 1) Who are buyers of a company? 2) What do customers appreciate? 3) How does a company make money in its operations, and, 4) What is the basic profitable logic of a company that delivers products with certain values and at a reasonable price. [1, page: 29]

**Employee diversification** (in terms of religion, race, language, and culture). Diversification of the workforce is a major challenge with significant implications for management practice. Managers must be trained to recognize differences among employees and respond to them in a manner that will enable them to improve their performance and achieve higher productivity level, and they are supposed to that without discrimination, as often happens with women as labor, starting from the phenomenon of glass ceiling, to the difference in motivation, conflict resolution style, and the particular style of women management. Diversification, if well managed, can increase business creativity. It can also improve decision-making process by enabling tackling a problem from different perspectives. On the other hand, if diversification is not managed properly, it can lead to difficulties in communication and conflicts which will reduce the efficiency of an organization. Due to all the above reasons, challenges, that require new and innovative solutions, arise.

**Coordinating relationships and business relations between companies that are mutually supportive.** In recent years there has been a dramatic increase in the supply of some goods (materials, parts and business services) which, until now, have been internally made, i.e. manufactured. The given increase was incited by efficient and economic means of communication. A new category of contracted producers, specialized in dealing with very specific stages (or operations) of a production process, has entered the business arena. The success of these undertakings has influenced the management of

entrepreneurial companies to spread this business engagements to other relevant business functions, such as research and product development, information systems, marketing (packaging, product testing, product distribution), and others. The ability to coordinate these activities with those implemented by the core staff in the center of a company (full-time staff) is an important challenge of modern management in the future, especially in the field of motivation, teamwork, leadership and conflict management.

**Technology.** Technology has had a great impact on innovation, as a challenge of modern management, because in essence it involves development, production and marketing of products and, on that basis, making profits /returns/. Technology development includes generating new knowledge and adding new techniques to the already available technology set. Information technology has had a special place in the business of modern companies. This technology has now become the core of modern technology, strategic resource that permeates all the activities that constitute the company's business value chain. These activities related to the chain of values /for example, those related to the input logistics, operations, output logistics, marketing and sales, service, etc.../ have one physical component and the other associated with the information processing; competitive advantage is increasingly based on the second one. Information technology supports the following five business goals: improving productivity, reducing costs, improving decision-making, improving relationships with customers and developing new strategic applications (creation of new jobs that have become technologically feasible, creating demand for new products and processes, creating new jobs on the basis of the development of existing activities). In modern management, the basic issue related to managing technology is about creating a balance with technology support which provides competitive advantage (the so called key technology), to keep it, in relation to support market-competitive technology whose capabilities can be significant, but they cannot be predicted with certainty (so called upcoming technology). The most important innovation of modern technology is connected to the emergence of highly computerized flexible manufacturing systems that are not limited by the production of only few products (economies of scope and economies of variety prevail over economies of scale), and they are also able to rapidly change products and improve their distinctiveness

without stopping the production process. They use numerically controlled machine tools and robots that lead to a drastic reduction in preparation costs and delays while diverting production from one model or product to another. Also, the costs of working capital are reduced to the minimum, because they allow stocks reduction.

## **5. CHALLENGES IN SALES AND SALES MANAGEMENT**

Sales and sales management are constantly shaping the new business reality. That is the reason why they present a real challenge for modern management. Sales and sales management are regarded as challenge since they are actually the main objective of every business. The achieved sales target transforms the business challenge into the business success by creating sales as a key determinant in the process of work finalization. Mastering modern management should be based on three essential components: business practices, business principles and business knowledge and skills. *Business practice* involves personal mastery of sales procedures in space and time; creative vision of sales force gives energy stimulant to business practice. *Business principles* include ideas that provide meaning to the selling procedure, make it reliable in such a way that creates consumer confidence, on the one hand, and create and control the contents of conduct sales staff, on the other. *Business knowledge and skills* are involve possession and application of what has been intellectually conceived or learned; it must reflect the essence of sales, which generates the creative power that shapes the present and future state of the company performance. Only by applying these components it is possible for the sales management to have a say and will be able to do so. In other words, they will be involved in an applicative business context, as a base for sustainable business affinity, streamlined by business profit. When 'a glass slipper' is finally found, it will determine the destiny; and it must be preserved. If it is lost and must be found again, nothing will be gained, that is, in this context: *nothing will be attained if the sales strategy keeps changing.*

*Sales* is the essence that determines interrelationships which meaning is covered by the *market economy* phrase, i.e. *a new economy* that appreciates modern management actions based on how much it is being able to utilize its resources (which have to be: *worthwhile* - when you use them to *exploit* external *opportunities* or neutralize

*threats; rare* - when companies lack them /or possess them on lower level; *difficult to imitate* or *replaceable by other resources*) while processing business challenges. A category of necessity has never been introduced in business history: 'A company has gained what was gained, and has lost what was lost. Nothing happens until someone sells something,' (Arthur 'Red' Motley) these sentences are proved to be truthful, beyond a rational thought, worth entering *the easy street*: to solve *sales challenges*. [4, page 8]

Practice oriented sales management is a scientific discipline of great importance for companies that do their business in a market economy. The basic assumption, which used to be a starting point for development of modern management sales challenges, was that selling technology influenced behavior of the existing and potential customers, so they would buy what companies were selling. There is no *business* without customers. There is no *long-term business deal* if you fail to retain customers. The term *customers* include any economic factor (embodied in an individual, institution, organization) that is responsible for the act of end-product consumption (tangible goods, services and etc.). Sales management consists of people professionally dedicated to work in sales. They should not *push* their activity toward *rationalization*, but they should *push* it toward *the values*. The sales path is very delicate. It can be the path leading to a fall. But, the philosopher Confucius wrote, "*Our greatest glory is not never falling, but rising every time we fall.*" Sales management exists to anticipate an event. [2, page 18]

Sales and sales management create identity of a company. The identity is determined according to the results, true measures, true distances, in relation to all stakeholders. Let's recall the story of baby porcupines, which bears a message quite applicable to the sales: if they come too close to each other, they wound each other; if they are separated, they are very cold. It should be emphasized that a company reflects in its customers. Hence, to underline it once again in the light of the market economy, only sales and sales management with respectable approach to challenges that *attack* competitive position of the company can take responsibility for business success. Therefore, sales and sales management need to continually develop, adapt, change and renew over time, review their existing assumptions and views. Overcoming challenges is always attributed to the person who

wants to be innovative. Remember the Thornton Wilder saying "*Every perfection is equally difficult.*"

## **6. CHALLENGES RELATED TO GLOBALIZATION**

Globalization means erasing borders between countries, i.e. establishing mobility of products, people and capital. This process has essentially been changing, and it continues to change the business environment. Hence, the challenge of modern management presents searching for answers to global issues. There are two challenges of globalization for companies. *The first* challenge establishes *the global market*, which provides significant opportunities for products marketing and resources supply; the geographical boundaries, in this respect, present the minor obstacle for strategic decision making and processing company activities. *Another* challenge is generated by *global competitiveness*, which presents a threat to the company management that goes beyond their national borders /because there are companies that have acquired their own unique set of experiences and resources, and companies which are difficult to deal with on the global market/, but it also present an opportunity (because partnerships are being set up on the global market, i.e. alliances, due to the production or product placement). The key response to globalization can be achieved by training managers to correctly perceive (i.e. to organize and interpret the effects) the environment and to successfully work with people from different cultures.

## **7. CONCLUSION**

It is our point of view that strategic approach of modern management achieves the real counterweight to business challenges by forming such resource structure that is able to proactively deal with what is "*empirically incorrect*". The fact that there are no commercial boundaries does not prevent modern management from directing toward strategic profiled actions. The challenges are, as a rule, complex, ambiguous and mysterious; the strategy does not use rare resource assets, it is *an image that keeps its authenticity, the image whose presence focuses on what will be obtained, not on what will be lost*. In the 21<sup>st</sup> century the main challenges of companies generally cover the areas of productivity, economies of scale, economies of scope and control; in the 21<sup>st</sup> century challenges are associated with deepening new economic reality paradigm, which main elements are:

environment, innovation, strategy, and creating employment frameworks which motivate employees, aided by the economies of distribution and economies of expertise, to contribute the achievement of optimal business performances. Modern management needs to ensure that full attention is devoted to every critical informational mass; it has to develop process activity that continuously uses new value options in an adopted strategy, as well as to speed up the allocation of traditional project resources toward initiatives oriented to the future.

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Other works include: *Interdependence between Business Forecasting, Planning and Decision making*, the Collection of Published Works: Science, Education and Diplomacy as a function of Euro-Atlantic Integrations, European Academy of Science, Vienna, 2006., *Application of different types of decision-making in preparation of the Master budget*, the Collection of Published Works: Science, Education and Diplomacy as a function of Euro-Atlantic Integrations, European Academy of Science, Vienna, 2007.

## **THE DEVELOPMENT OF BUSINESS FORECASTING AND CONTEMPORARY TENDENCIES**

Forecasting is a science and art of predicting future events. It has come a long way from magic, tea leaves and crystal balls to science.

Forecasting as a science - though long disputed, as initially there were many who regarded it as a mere skill - studies general principles, methods and means of forecasting future development of certain events. Work environment forecasting is a prerequisite for predicting the outcome of an intended action, on the basis of the principle of continuous adaptation to new conditions.

As a rule, forecasts contain more or less errors. For example, sales volume of a company shall only in rare cases exactly correspond to forecasted quantities. Slight variations in a forecast can be solved by additional capacities, inventory, or changes in order terms. However, large variations in forecasts can lead to serious disturbances in production. For that reason, it is necessary to reduce errors by improving prediction, and this is achieved by:

- Incorporating more flexibility in production
- Shortening the time for which prediction is required

Since even good forecasts can contain an error, the aim is to achieve the lowest possible error in accordance with reasonable forecasting costs.

The aim of economic forecasting is to reduce risk and uncertainty which a company faces when making business decisions on a short term basis, as well as when planning long-term corporate development.

Considering the presence of errors in forecasting, all forecasts should have a minimum of two values, where one value would represent the best estimate (of demand, price, risk ...) and another value the forecasting error - deviation. Making predictions on the basis of one value only means ignoring errors, although this is what usually happens in practice.

The difference between forecasting and planning should be clarified at the very beginning. We use planning in a conscious

attempt to change future events, while forecasts are used only to predict future events.

Forecasting represents an input, common to all types of business planning and control, both within and outside production function. Marketing uses forecasts for products, promotion and pricing planning. In finances as well, predictions are used as an input for financial planning.

Economic development forecasting as a scientific discipline as function of time, during the past few decades has gained in importance in economic researches, due to increased uncertainty, which launched the theme of the future to the very top of scientific research.

Forecasting as an economic category is the key stage in a decision-making process. Regardless of whether we deal with predicting business conditions or the outcome of intended actions, forecasting has a dual role and importance in the decision-making process. The first role is related to informative character of forecasting and the other to guide decision making.

Economic, technological and other types of forecasting of events which make up the economic life of a country suggest potential future directions of development and a basis for creating development policy of a society, economy and all entities within business systems, because forecasting provides answers to the following questions: what types of changes are expected, of what intensity, in what time and field of development. All this suggests that anticipatory knowledge gained by forecasting is invaluable in choosing optimal paths of development, by making the right decisions.

The main objective of forecasting is reduction of risk and uncertainty when making plans and other types of business decisions which have an impact on future results.<sup>98</sup> Thereby, one should bear in mind that forecasting is not a mechanical transmission of past into future. Using past to predict future means an inclusion of a real principle in development of events, especially social ones, which, usually, have an evolutionary development. Future cannot occur unexpectedly and suddenly: it has its roots in the past (current state of economy, decisions that have already been made, processes that have

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<sup>98</sup>Jovanovic Aleksandar, *Uncertainty and Planning, study: The quantitative models of exploring the future*, Belgrade, Serbian Academy of Sciences and Arts, 1982.

been initiated and that will be developing for some time by inertia, unexhausted sources which generate them...), so it could be regarded as a result of past and present actions. This feature is important with respect to the application of mathematical and statistical methods for forecasting future business moves, or measuring the efficiency of the measures taken - global, at the level of an economy, as well as concrete ones, at the level of a bank, as a business system.

The second aim of forecasting, resulting from the basic one, is to promote and raise scientific level of management, planning, decision making, information-management and other business functions. Also, forecasting should help with estimating turning points in economic processes, formulating goals and choosing optimum direction of development, that is, making future more transparent – more recognizable.

Nowadays, the role of forecasting is substantially different as compared to the role it had in the period following the end of the World War II. Namely, an increased importance of forecasting as an integral part of management process, and consequently a prerequisite for creating business and economic policy, information-management and planning, inevitably made the traditional approach to forecasting (which is characterized by a purely informative and subjective character, undeveloped methodology and lack of organization) to be replaced by a modern approach which enables future management, as well as recognizing opportunities for development of both society and certain business systems, by using, among other things, modern mathematical and statistical methods and forecasting models.

On the basis of performed practical and theoretical researches, most common reasons for changes in place, role, significance and content of forecasting are considered to be the following:

- \* Awareness of a necessity to include forecasting as a basis for planning development and operation of business entities;

- \* The role of forecasting in providing guidance in the search of opportunities for development;

- \* An increase in number of quantitative methods and forecasting models, their complexity and inter-disciplinarity as well as possibility of practical application;

- \* Rapid changes in the environment - which contribute to an increase of uncertainty - risks in business operations, thus making the process of preparation and decision-making more difficult;

\* Development of computer technology and the possibility of an adequate use of computers in forecasting process (development of alternative forecasting models, on the basis of alternative assumptions, flexibility in increasing number of variables, including bigger time series data, number of equations, increased accuracy and security in calculations, flexibility in changes made on the model).

\* Modern approach to forecasting, which makes possible managing the future, as well as recognizing developmental opportunities, is not possible without a quantitative approach to forecasting, that is, use of mathematical and statistical methods and models. Namely, during the last decades of the century, economic researches have seen an intensive development of mathematical methods and models, because economy is one of those scientific areas where mathematics has found its application.

It is Marshall who in his lecture "The Present Position of Economics" writes about the potentials of analysis in economic theory, and points out that economic theory is ... "a mechanism which can always be applied in order to detect truths of certain kind."<sup>99</sup>

There are several reasons which have contributed to an increasing interest of economists for quantitative forms of research, especially for the application of mathematical methods. One of the primary ones is definitely the nature of mathematical researches, which, owing to emergence of new methods for solving complex practical and theoretical problems, today significantly differs from earlier approaches. As opposed to the abstract way of thinking, with general results connected with certain economic concepts, which was dominant at an earlier stage of the application of mathematics, in the post-war period a qualitative change took place, and it is reflected in a greater use of methods in empirical and theoretical researches when solving specific problems in the area of economy. This orientation has made possible a faster development of many disciplines, solved many practical and theoretical problems and opened the door to new researches.

The current stage of development is characterized by a more frequent use of mathematical methods and models in various forms of economy. They make a specific approach to economic problems, by

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<sup>99</sup> Schumpeter, A Joseph, *History of Economic Analysis – Part 2*, Zagreb: Informator, 1975, p. 799.

means of which complex and dynamic reality is successfully approximated, studied and directed in accordance with the goals defined by economic policy. One of the obstacles to a faster acceptance and application of mathematical methods and models is the fact that phenomena in social sciences, especially in economy, usually are of stochastic nature, with highly correlative interrelation, thus making any direct application of mathematics as well as functional exploration of a phenomenon in the form of principles only an approximate image of real moves and changes. Under the influence of these factors, decisions which affect system management must also have elements of uncertainty. For all these reasons, formulae and algorithms have been introduced to economic decision-making, which was a precondition for defining and application of many mathematical models. Their purpose is to provide optimal solutions, which should be the aim of a conscious action in economic forecasting, as a pre-phase of decision-making.

Another significant reason is that models can serve as a basis for performing experiments with smaller spending of resources and with significant save of time, as compared to the same researches that would be implemented on real systems. Thus, at the same time, conditions are created for faster acquisition of knowledge necessary to improve functioning of real systems.

On the other hand, in the economic conditions characterized by a high level of automation of production, rapid changes in labor factor and pronounced dynamics of development, business decisions should result from anticipatory estimate of the impact of internal and external determinants, and the process of preparation for decision-making and decision-making itself should be such so as to decrease uncertainty about the future and reduce the risk to a minimum in accordance with forecasted business development.

Preparation and decision-making cannot be performed by using traditional methods of analysis and intuition, because they disregard risk and do not measure it. This can be achieved by means of technology of forecasting as well as quantitative methods and models, as its essential element and tool for high-quality and effective management of the future, by making decisions based on the information relating to the future and making it possible to see business environment in as realistic manner as possible.

There are certain contemporary tendencies in business forecasting that stem from methods developed a few decades ago. At that time the level of technology could not support the application of those methods. Nowadays, with constant technological advance, certain methods, like system dynamics, are gradually finding their place in the business world. System dynamics was developed at MIT in the 1950s by Jay Forrester and it is an aspect of systems theory as a method for understanding the dynamic behavior of complex systems. The basis of the method is the recognition that the structure of any system — the many circular, interlocking, sometimes time-delayed relationships among its components — is often just as important in determining its behavior as the individual components themselves. It applies to dynamic problems arising in complex social, managerial, economic, or ecological systems -- literally any dynamic systems characterized by interdependence, mutual interaction, information feedback, and circular causality.

It has been used to model everything from the life of insurance companies to new product adoption in marketing campaigns. Generational Dynamics applies System Dynamics to generations and population systems within a country or the world. To prove the validity of generational theory, the web site [GenerationalDynamics](#) has been set up since 2002 to post specific analyses and predictions that could be tested. This web site has been an important part of the development, because it exposes these analyses and predictions to the general public, and allows individuals to make their own judgments. There are now thousands of articles on this web site, most containing specific predictions and analyses that have been tested and shown to have turned out to be true. For example, it predicted in 2003 that there would be no civil war in Iraq or, if there was, that it would fizzle quickly, and that is what happened.

Macroeconomics models could be vastly improved by incorporating Systems Dynamics concepts as applied to population changes. Briefly it would be done as follows: Note that survivors of the 1930s Great Depression were extremely risk-averse, very suspicious of credit, and very conservative in their investments. Model the population "outflow" of survivors through death, and the "inflow" of younger generations through birth, and measure such things as risk-averseness of the different generations. It will turn out that the next crisis occurred at precisely the time that the Great Depression

survivors in senior management positions all disappeared (retired or died), all at once in the early 1990s. Incorporating Systems Dynamics into macroeconomic models would not make the models perfect, but it would make them much more accurate than they've been so far.

Generational Dynamics does not replace traditional forecasting tools, but it provides powerful additional tools that can be used in conjunction with traditional tools to provide much more accurate analyses and predictions in countries around the world.

### **Abstract**

*Forecasting is a science and art of predicting future events. It has come a long way from magic, tea leaves and crystal balls to science.*

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*Modern approach to forecasting, which makes possible managing the future, as well as recognizing developmental opportunities, is not possible without a quantitative approach to forecasting, that is, use of mathematical and statistical methods and models. Namely, during the last decades of the century, economic researches have seen an intensive development of mathematical methods and models, because economy is one of those scientific areas where mathematics has found its application.*

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## MARKETING MANAGEMENT

### Abstract

*Many companies realized that they have to be organized in the way that the customers present focus of their overall activities. In order to achieve this state companies require to: develop a company-wide passion for customers, organization that is oriented towards customer segments instead towards products, develop a deep understanding of customers through qualitative and quantitative research. This is a complex concept to be realized and requires a redirection of occupation and department definition, responsibilities, incentives and relationships. Marketing managers should invest more effort in marketing strategic innovation and significant consumer impact. The organization must also be creative. Companies must watch trends and be ready to capitalize on them. Achieving marketing excellence in the future will require new challenges and opportunities, and new set of skills and competences.*

**Key words:** *modern marketing, management, marketing officer, innovations, relationship marketing, internal marketing, integrated marketing communication, social responsibility*

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This Paper focuses on the marketing management in terms of modern marketing organizations, holistic marketing and the ability of the marketing managers to work with cooperation and to encourage customer focus by each discipline. Marketing managers today must also be concerned for the welfare of society as a whole as well as to focus their attention to the implementation process of solving marketing opportunities.

Marketing management is the art and science of choosing target markets and getting, keeping, and growing customers through creating, delivering, and communicating superior customer value.<sup>100</sup>

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<sup>100</sup> Philip Kotler and Kevin Keller, Marketing Management, Pearson, Prentice Hall, 2007.

In the marketing world people are daily engaged in a numerous marketing activities, which profoundly affect their lives. Surrounded with a vast number of information organizations are involved for years in creation of new concepts of marketing possibilities. Marketing has become an increasingly vital ingredient for business success. The modern marketing department has evolved through the years from a simple sales department to an organizational structure where marketing personnel work mainly on cross-disciplinary teams.

Modern marketing departments can be organized in a number of ways. Some companies are organized by functional specialization, while others focus on geography and regionalization. Still others emphasize product and brand management or market-segment management. Finally, some companies have strong corporate marketing, others have limited corporate marketing, and still others place marketing only in the divisions.

Effective modern marketing organizations are marked by a strong cooperation and customer focus among the company's departments: marketing, R&D, engineering, purchasing, manufacturing, operations, finance, accounting, and credit.

A brilliant strategic marketing plan counts for little if it is not implemented properly. Implementing marketing plans calls for skills in recognizing and diagnosing a problem, assessing the company level where the problem exists, implementation skills, and skills in evaluating the results.

Companies must practice social responsibility through their legal, ethical, and social words and actions. Cause marketing can be a means for companies to productively link social responsibility to consumer marketing programs. Social marketing is done by a nonprofit or government organization to directly address a social problem or cause.

In the modern companies it is imperative now that marketing is not done only by the marketing department. To create strong marketing organizations, marketing managers must be strongly connected with executives on other departments and vice versa.

### **Chief Marketing Officer Responsibilities**

Marketing planning process consists of analyzing marketing opportunities, selecting target markets, designing marketing strategies, developing marketing programs, and managing the marketing effort.

Financial success often depends on marketing ability. As a necessity many companies have created a Chief Marketing Officer (CMO) to collaborate with other Chief Executives such as a Chief Financial Officer (CFO) and Chief Executive Officer (CEO). The Chief Marketing Officer has to coordinate the company's internal marketing activities and to coordinate marketing with finance, operations, and other company functions to serve the customer.

There are five key functions for a Chief Marketing Officer in leading marketing within an organization:

- strengthening the brands,
- measuring marketing effectiveness,
- driving new product development based on customer needs,
- gathering meaningful customer insights,
- utilizing new marketing technology.

The set of tasks necessary for successful marketing management includes:

- developing marketing strategies and plans,
- capturing marketing insights,
- connecting with customers,
- building strong brands,
- shaping the market offerings,
- delivering and communicating value, and
- creating long-term growth.

There is little agreement so far on how much influence and authority marketing should have over other departments. Naturally, the Chief Marketing Officer must work under permission of other departments particularly top management. Companies need to develop a balanced orientation in which marketing and other functions jointly determine what is in the company's best interests. To be in constant communication marketing department must propose at times a mutual meeting with departments so that understanding and good relations are warranted.

The following is necessary to create a customer-focused company:

- convince,
- appoint,
- get outside help,
- change rewards, and measures,

- hire strong talent,
- develop training programs,
- install MPS,
- annual excellence recognition, and
- process-outcome, empower

Marketing managers are expert at managing demand. They seek to influence the level, timing, and composition of demand. Marketing managers are involved in marketing many types of entities: goods, services, events, experiences, persons, places, properties, organizations, information, and ideas. They also operate in four different marketplaces: consumer, business, global, and nonprofit.

### **Competing Marketing Concepts**

There are five competing concepts under which organizations can choose to conduct their business:

- the production concept,
- the product concept,
- the selling concept,
- the marketing concept, and
- the holistic marketing concept.

The production concept understands that consumers will prefer products that are widely available and inexpensive.

The product concept understands that consumers will favor those products that offer the most quality, performance, or innovative features.

The selling concept understands that consumers and businesses, will ordinarily not buy enough of the organization's products, therefore, the organization must undertake aggressive selling and promotion effort.

The marketing concept is based on customer-centered orientation. It understands that the key to achieving organizational goals consists of the company being more effective than competitors in creating, delivering, and communicating superior customer value to its chosen target markets.

The holistic marketing concept understands that each and every aspect of business should be carefully considered. Holistic marketing is based on the development, design, and implementation of

marketing programs, processes, and activities that recognize their wideness and interdependencies. Successful holistic marketing requires effective relationship marketing, integrated marketing, internal marketing, and socially responsible marketing.

Healthy long-term growth for a brand requires that the marketing organization be managed properly. Holistic marketing managers must engage in a host of carefully planned, interconnected marketing activities and satisfy an increasingly broader set of constituents. They must also consider a wider range of effects of their actions. Corporate social responsibility and sustainability have become a priority as organizations grapple with the short-term and long-term effects of their marketing. Some firms have embraced this new vision of corporate enlightenment and made it the very core of what they do.

### **Relationship Marketing**

Relationship marketing has the aim of building mutually satisfying long-term relationships with key parties—customers, suppliers, distributors, and other marketing partners. Relationship marketing builds strong economic, technical, and social connections among the parties. Marketing must not only do customer relationship management (CRM) but also partnership relationship management (PRM). Customers remain the prime focus in the centre of the model but as shown in figure 1, there are five other markets where a detailed marketing strategy may be needed.<sup>101</sup>

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<sup>101</sup> Sveden Hollensen, *Marketing Management – A Relationship Approach*, Prentice Hall, England, 2003.



*Figure 1. The relationship marketing six market model*

The marketing department has to monitor and control marketing activities continuously. Marketing plan control involves analysis to ensure that the company achieves the sales, profits, and other goals established in its annual plan. The main tools are sales analysis, market share analysis, marketing expense-to-sales analysis, and financial analysis of the marketing plan. Profitability control seeks to measure and control the profitability of various products, territories, customer groups, trade channels, and order sizes. An important part of controlling for profitability is assigning costs and generating profit-and-loss statements.

Efficiency control focuses on finding ways to increase the efficiency of the sales force, advertising, sales promotion, and distribution. Strategic control entails a periodic reassessment of the company and its strategic approach to the market place using the tools

of the marketing effectiveness and marketing excellence reviews, as well as the marketing audit.

Marketing must be involved in all elements of the company's operations and work closely with its suppliers, channel partners, with the understanding that each element or function provides an opportunity to market the product to the ultimate consumer.

### **Integrated Marketing**

Integrated Marketing Communications is concept under which a company integrates and coordinates its many communication channels to deliver a clear and consistent message about the organization and its products. It is common to think of integration as being almost exclusively about the integration of the promotional mix elements. This is a gross oversimplification of the communication. Other dimensions include the integration of creative elements, intra and inter organizational factors, integration of the promotional mix with other marketing mix factors, information and database systems, integration of communications targeted towards multiple audiences – internal and external, corporate and geographical integration. An important part of integrated marketing communications is its management and organization.<sup>102</sup>

### **Internal Marketing**

Internal Marketing ensuring that everyone in the organization embraces appropriate marketing principles and engages in choosing, providing, and communicating customer value. Internal marketing must take place on two levels: at one level, the various marketing functions (sales force, advertising, customer services, product management and marketing research) must work together; secondly, marketing must be embraced by the other departments so that they must cooperate with marketing sector and create positive spirit toward customers.

Figure 2. shows the relationship between the criteria for internal marketing and the implementation of one particular organizational strategy that is at the heart of service organizations, namely, service quality. Company becomes an effective marketer when all employees realize that their jobs are to create, serve, and satisfy customers. To

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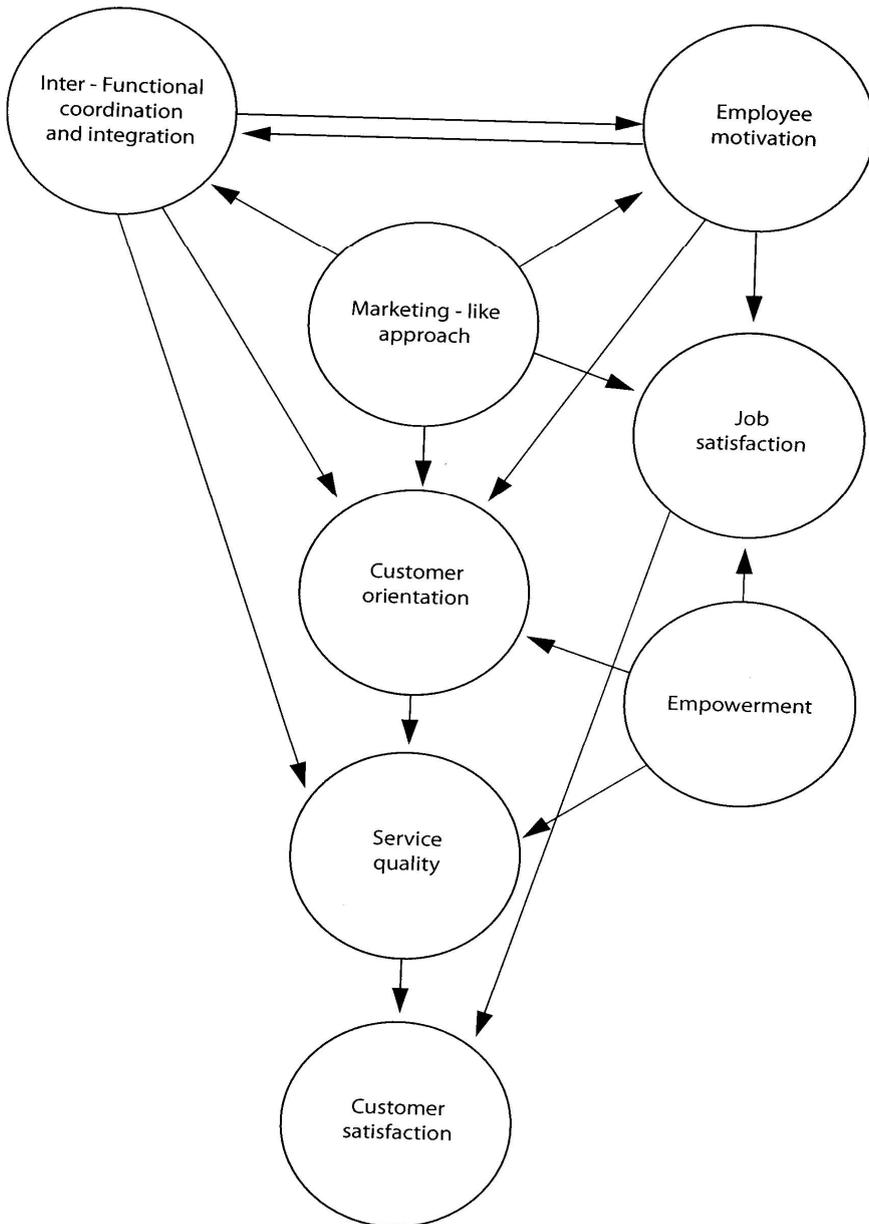
<sup>102</sup> David Pikton and Amanda Broderik, *Integrated Marketing Communications*, Prentice Hall, England, 2005.

achieve customer-related outcomes, companies appoint process leaders who manage cross-disciplinary teams.

The most common form of marketing organization consists of functional specialists reporting to a marketing vice president, who coordinates their activities. Additional specialists might include: customer service manager, marketing planning manager, market logistic manager, direct marketing manager, internet marketing manager.

A company selling in a national market often organizes its sales force along geographic lines. Several companies are adding area-marketing specialists (regional or local marketing managers) to support the sales efforts in high-volume markets. Some companies have to develop different marketing programs in different parts of the country out of necessity because their brand development varies so much.

Product or brand management organization is often related to companies producing a variety of products and brands. A product-management organization is needed if the company's products range is beyond the ability of a functional organization to handle. Some of the tasks that product or brand managers may perform include: developing a long-range and competitive strategy for the product, preparing an annual marketing plan and sales forecast, working with advertising and merchandising agencies, increasing support of the product among the sales force and distributors, and initiating product improvements to meet changing market needs.



*Figure 2. A model for internal marketing*

Market-management organization is desirable when customers fall into different user groups with distinct buying preferences and practices. A market manager supervises several market managers - market-

development managers, market specialists, or industry specialists. They develop long-range and annual plans for their markets and are evaluated by their market's growth and profitability. In a customer-management organization, companies can organize themselves to understand and deal with individual customers.

### **Socially Responsible Marketing**

Companies are steered to practice a higher level of corporate social responsibility by several forces: rising customer expectations, changing employee expectations, government legislation and pressure, investor interest in social criteria, changing business procurement practices. Serving people's interests, and not their own is the code that most successful companies in the world stand by. Society must use the law to define those practices that are illegal, antisocial, or anti-competitive. Organizations must ensure that every employee knows and observes all relevant laws.

Companies must adopt and circulate a written code of ethics, build a company tradition of ethical behavior, and hold its people fully responsible for observing ethical and legal guidelines. Deciding how to communicate corporate attitudes and behaviors towards social responsibility can be difficult.

Sustainability is the importance of meeting humanity's needs without harming future generations, has risen to the top of many corporate agendas.

### **Marketing Implementation**

Marketing implementation is the process that turns marketing plans into action assignments and ensures that such assignments are executed in a manner that accomplishes the plan's stated objectives. Marketing strategy focuses on goals and motives of marketing activities and implementation focuses on people, places, time and manner. Companies today are motivated to make their marketing operations more efficient and their return on marketing investment more measurable. Information technologies are used to improve the management of companies marketing resources. Information systems that integrate and automate processes within marketing are often named as: marketing resource management (MRM), enterprise marketing management (EMM), marketing automation systems (MAS), marketing resource

management (MRM). These software packages provide resources to marketing managers to find whatever information and decision structures they need on their computers.

### **Evaluation and Control**

Companies have to monitor and control marketing activities. Company's achievements are controlled by annual-plan that aims to ensure that the sales, profits, and other goals are met. The heart of annual-plan control is management by objectives. Several steps are involved: management sets monthly or quarterly goals, management monitors its performance in the marketplace, management determines the causes of serious performance deviations, and management takes corrective action to close the gaps between goals and performance. This control model applies to all levels of the organization.

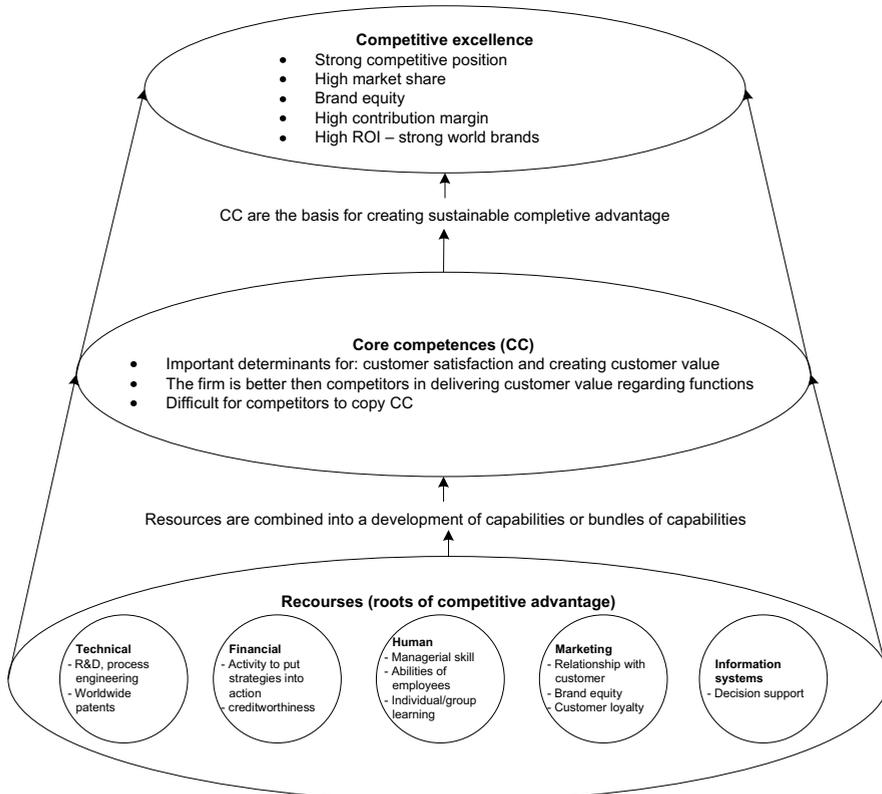
Evaluation of actual sales is analyzed and evaluated in relation to goals. Following tools make it work: sales-variance analysis measures the relative contribution of different factors to a gap in sales performance and microsales analysis looks at specific products or territories that failed to produce expected sales.

Company sales don't always reveal how well the company is performing relative to competitors. Conclusions from market share analysis are subject to certain qualifications. Outside forces affect all companies in the same way. A company's performance should be evaluated against the average performance of all companies. New companies entering the industry will cause all existing companies market shares to fall. Companies sometimes deliberately decline their market share in order to decry number of low profit or nonprofit customers and thus improve profits. Figure 3. shows the connection between resources, core competences, sustainable competitive advantages and competitive excellence.

### **Future of modern marketing organization**

Top management has recognized marketing must be "holistic" and less departmental. Bearing in mind new consumer capabilities such as a substantial increase in buying power, greater variety of goods and services, vast deal of information available, better ease in interacting and placing orders, ability to compare notes on products and services and

amplified voice to influence peer and public opinion company is trying to develop a new set of skills and competencies.



*Figure 3. The roots of competition*

Marketing managers must achieve larger influence in the company if they are to be the main architect of business strategy. Therefore, they continuously create new ideas, make every effort for customer insight and treat customers differently but appropriately, build their brands through performance, more than through promotion, go electronic and win through building superior information and communication system.

Proficiency in following areas are demanded: customer relationship management (CRM), partner relationship management (PRM), database marketing and data mining, contact center management and telemarketing, public relations marketing including event and sponsorship marketing, brand building and brand asset management,

experiential marketing, integrated marketing communications, profitability analysis by segment, customer, and channel.

In principle, all business functions should interact harmoniously to pursue the company's overall objectives. In the typical organization, each business function has a potential impact on customer satisfaction. Under the marketing concept, all departments need to be customer oriented and work together to satisfy customer needs and expectations.

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Andrea Mitovski was born 1983, in Vrsac, Serbia. She graduated at Bucharest University of Economics, at the Faculty of Business Administration in Foreign Languages, in 2006. She continued MBA studies at the same University, and acquired title MBA, with the theses: Stress at work: stress management with AV Stress Management Program. Andrea Mitovski is PhD candidate at the Bucharest University of Economics and the PhD theses is titled: Investment in Stress Management. 2008. Andrea Mitovski also works as a management consultant and in the field of human resource. She started her academic career in 2008, when she became assistant at the scientific field of management. At the present, she works at the Faculty of European Business and Marketing.

## **STRESS MANAGEMENT AND MOTIVATION OF EMPLOYEES**

### **Abstract**

*Working stress is the fastest growing cause of absence from work. Pressure at workplace, career development, inadequate recognition of effectuated work, and bad defined goals and requirements are of the most frequent causes of organizational stress reported by employees.*

*Researches have shown that reduce of organizational stress increase employees work performance, leading in greater professional results, generating increase in productivity and profitability of the whole organization.*

*Stress may negatively influence the productivity and competitiveness of the organization, and may also increase health insurance costs. Therefore, employers should consider stress at workplace as a serious problem and they must take measures to prevent employees suffering stress arising from their work, through stress management programs.*

*It is certainly that by improving working conditions and by motivating employees, a company may reach better results in professional performance of any of them. What is different from a person to person, or from a society to a society, are included factors. Of course that this depends on everyone's personality, but it also depends on socio-economic factors, mentality and many other factors.*

*This paper presents how stress management can include motivation factors in order to increase employees' working performance, which will lead to increase in organization's profitability and competitiveness. DEA Stress Management Program includes two approaches for managing organizational stress: at organizational level and at individual level, taking into consideration the characteristics of these two. While considering motivational factors, one must consider both material and non-material motivators.*

**Key words:** *organizational stress, organizational stress management, motivation, material factors, non-material factors.*

### **Introduction**

There are plenty of general problems that people at work worry about, such as increasing job competition, globalization, terrorism, annual appraisals, and even new technology. Beside these, employees are put under pressure to meet sales targets, attend meetings on time, fit in with changes in organization by learning and following up new procedures. All these can result different levels of stress.

Stress may negatively influence the productivity and competitiveness of the organization, and may also increase health insurance costs. Costs caused by work-related stress amount about 20billion EUR yearly.<sup>103</sup>

Even if there is a pleasure of standards that can be applied, stress experience is very individual, because beside stress motivators, stress experience is influenced by personal's character and his past experience. Moreover, there should be considered the fact that a

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<sup>103</sup> *Guidance on Work-Related Stress, European Commission, Directorate-General for Employment and Social Affairs, 2002*

stressor can be experienced in different ways by different persons, while stress consequences are also different from a person to another.

There are lost 18 million days yearly due to mobbing at workplace.<sup>104</sup> A research that took place at the University of Manchester Institute of Science and Technology (UMIST) discovered that a half of the interviewed employees have suffered by some type of mobbing at workplace. Mobbing<sup>105</sup> is a type of psychological harassment referring to bad behaviour. Affected persons are not just victims as individuals, but also the other persons from their environment are, which means that the whole workplace is affected.

Stress can cause a lot of mistakes by the employees, which may have a negative impact over the whole organization. Affected by stress, employees are less tolerant for any uncertainty, they do not listen and do not pay attention. Organizational stress also creates a chronic system that leads to high level of burnout.

### **Organizational Stress**

Intensive environmental changes and intensified needs increase levels of tension and levels of activity. Consequently, balance within the organizational environment is disturbed and has to be reestablished. Sometimes these changes can be so strong, disturbing the dynamic balance between the individual and the environment, requiring extra effort and extra time to reestablish this balance. This psychological situation is called **stress**.<sup>106</sup>

There are two **types of stress**: constructive stress and destructive stress. *Constructive stress (eustress)* has a positive impact on both attitudes and performance. This stress can be recognized as the tension that causes people to complete assignments on time in difficult situations, to pay attention, or to study hard in such situations. This is when stress prompts an increase in work effort, stimulates creativity, or encourages greater diligence. This positive effect of stress can be positive for short-term targets, because they can become negative if it continues for extended periods of time, affecting employees' health. *Destructive stress (distress)* has a negative impact

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<sup>104</sup> „Workplace Bullying in Britain”

<sup>105</sup> *Bezbednost i zdravlje na radu*, NIP Obrazovni informator, Vrnjačka Banja, 2008

<sup>106</sup> Mitovski, A., Näsulea, Ch, *The Influence of Organizational Stress on Negotiation* – Management, Innovation and Development, Vrnjačka Banja, 2009

on both attitudes and performance. This stress is dysfunctional for both the individual and the organization. A person's physical and mental system can be overload and broken down by stress resulting in absenteeism, high staff turnover, errors, accidents, dissatisfaction, reduced performance, unethical behaviour, and illness.

Organizational stress can emphasize three **stages**: arousal, resistance, and exhaustion. During the *arousal stage* of organizational stress, persistent irritability, anxiety, insomnia may occur, as well as occasional forgetfulness or inability to concentrate. During the *resistance stage* of organizational stress, absenteeism or tardiness for work occurs. Workers are tired and fatigued for no reason. This stage of stress leads to procrastination and indecision, and increased use of coffee, alcohol, and nicotine. Social withdrawal with cynicism appears, while employees become resentful, indifferent, and defiant. In case of severe *exhaustion stage* of organizational stress, chronic sadness or depression, chronic mental and physical fatigue, and chronic stress related illnesses such as headache, stomach ache and others are manifested. Workers experience isolation, withdrawal, and self-destructive thoughts.

Talking about **stressors**, they can be divided into two categories: work-related stressors, and non-work related or personal stressors. *Work-related stressors* are those produced from type of work and working conditions, while *non-work stressors* depends on behaviour, family events, socio-economic conditions, inadequate coping, and many other personal factors. One's job can be affected by all of these factors, as it is difficult to separate professional and personal life, especially in contemporary life.

Organizational stress becomes more and more expensive. A decrease in productivity influenced by organizational stress is caused by costs increased by great working days lost due to stress. Employers should be more informed and should take interventions efficiently in order to reduce and to prevent stress.

### **Organizational Stress Management**

In order to manage organizational stress efficiently, it is necessary to determine the nature of stress, prevent its increase, and manage it in the most effective way. To complete these objectives, it is important to know what is happening in society, how does act contemporary life and which are current working practices that are

causing stress. Recent changes in patterns of employment and working conditions, such as declining job security, longer working hours, lower levels of wages, and more coercive management styles have increased numbers of people experiencing organizational stress.<sup>107</sup>

The relationship between objective conditions at workplace and individual's health and well-being is mediated by subjective factors. These subjective factors usually represent the consciousness of the affected individual and the way they interpret the events and conditions of their work. Element of perception, cognition and reflection on the part of a person are based on the self-reported physical and mental effects of the individual concerned. Something that one person experiences as a pressure can be experienced as a stimulating challenge by another person. Levels of reliance and tolerance vary from person to person, depending on different historical, social, cultural experiences, and many other factors. A source of stress can be any adverse work experience, from mild discomfort to physical assault. There are some issues that cannot be controlled, and in this case workers should know how to accept them. For all the other that can be controlled, possible solutions will be found.<sup>108</sup>

By **DEA Stress Management Program**<sup>109</sup>, stress within an organization is **managed at two levels**: at organizational level by organizational arrangement, and at personal's level by individual's arrangement. *Organizational arrangement* examines the structure of the relationships between stressors and strains, without taking consideration on individual differences. This means that job design and control or decision interact to influence health. *Personal arrangement* focuses on the cognitive processes and emotional reactions based on individuals' interactions with their environment, so that items cannot be conceptualized as stressors independently of a

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<sup>107</sup> Mitovski, A., *Managementul stresului organizațional la nivelul organizației – Conferința anuală a doctoranzilor în științe economice*, Academia de Studii Economice, București, ROMANIA, 2009

<sup>108</sup> Der Radivojevic, A., Mitovski, A., Năsulea, Ch., *Trening programi za prevenciju i suzbijanje stresa na radnom mestu*, 1. Naučno-stručni skup Sarajevski dani psihologije, knjiga rezimea, Odsjek za psihologiju, Filozofski fakultet, Univerzitet u Sarajevu, Sarajevo, 2009

<sup>109</sup> Mitovski, A., *Teza de doctorat: Investiția în managementul stresului organizațional*, Academia de Studii Economice, București, 2011

person's reaction to them, because what is stressful for one person may not be stressful for another. Once a problem has been identified, specialists start identification and development of solutions, by training for employers and employees, managers, provision of information, timeframe for review, in order to develop awareness of stress and its management, and to educate employers about how they can limit organizational stress.<sup>110</sup>

Different conceptions of stress are linked to different approaches of interventions, based on organization (such as job design and organizational restructuring) and based on individual (stress management training, counseling, and therapies).<sup>111</sup>

Management standards and those presented and developed in DEA Stress Management Program, help employers to make decisions specific for risk control and for organisational stress control. Such standards define expectations, conditions, control, relations, changes, role and support, by intervention of the employees referring to their satisfaction related to these elements. Once that a problem was established, specialists start to identify and develop solutions. Some of the components of these programs are trainings for the employers and employees, necessary information data base, and others. The idea is to develop the knowledge about stress and stress management, and to educate the employees.

Implementation of organisational stress management strategies results in happier and healthier personnel, a lower level of absenteeism, and an increase in profitability.

### **Motivation**

Scientists believe that the main work stimuli are material factors. But, most of the researches did not prove this hypothesis. It is supposed that instead of the domination of the material factor, there is a dynamic hierarchy of work engagement motivators for the employees. The importance of material and non-material factors is

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<sup>110</sup> Caracota Dimitriu, M., Mitovski, A., *Organizational Stress Management – IX Conferință Internațională „Investițiile și Relansarea Economică”*, Economia, seria Management, Vol. 12, Nr.1 special/2009, București, 2009

<sup>111</sup> Der Radivojevic, A., Mitovski, A., Năsulea, Ch., *Training programi za prevenciju i suzbijanje stresa na radnom mestu*, 1. Naučno-stručni skup Sarajevski dani psihologije, knjiga rezimea, Odsjek za psihologiju, Filozofski fakultet, Univerzitet u Sarajevu, Sarajevo, 2009

changing depending on the age, career success, qualifications, as well as on the social development characteristics (e.g. economic difficulties periods and critical situations). Economic threaten increases dependence on financial income, therefore they become more motivationally important.<sup>112</sup>

Money, a term often used instead of salary, does not necessarily mean income or wage of an employee, but also his benefits and rewards. The importance of money as a motivational factor represents both the ability to satisfy financial needs, and social needs. Money is usually “the personalization of success of a human being, in both his life and work”. Bennett argues the favor of money as a dominant motivational factor (Vujić, 2003) by the following: high income provides different physical goods, leads to respect from other employees and from the environment, thus providing high living standard; it is also an indicator for professional competence and a success symbol; money satisfy more needs at the same time, such as being used for luxury goods that provide social prestige, or may be used for different hobbies in order to satisfy personal needs; income high offers the possibility to compare a person within an organization with other persons by his success and abilities.<sup>113</sup>

### **Stress Management and Work Motivators in Serbia**

In summer 2009, Mitovski, Der Radivojevic did a research on organizational stress<sup>114</sup> in Belgrade. Sudy involved 60 interviewers on an equale sex structure. A questionnaire<sup>115</sup> was applied to interviewers from 18 to 56 age, the largest category being from 31 to 40 years old. Interviewers were persons with university and postgraduate studies, 72% : 28%.

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<sup>112</sup> Der Radivojevic, A., Mitovski, A., *Stres kao faktor promene hijerarhije motivatora u uslovima ekonomske krize* – Pojedinaac, porodica i preduzeće u uslovima društveno-ekonomske krize – Sranje i mogućnosti prevazilaženja, 2, Fakultet za pravne i poslovne studije, Novi Sad, 2009

<sup>113</sup> Der Radivojevic, A., Mitovski, A., *Stres kao faktor promene hijerarhije motivatora u uslovima ekonomske krize* – Pojedinaac, porodica i preduzeće u uslovima društveno-ekonomske krize – Sranje i mogućnosti prevazilaženja, 2, Fakultet za pravne i poslovne studije, Novi Sad, 2009

<sup>114</sup> Mitovski, A. (MBA) and Der Radivojevic, A., (psychologist)

<sup>115</sup> Questionnaire made by Mitovski, A.

37% of interviewees sustained that they are often affected by stress at workplace, 37% - sometimes, less than - 10% always, less than 10% - never, while 13% are rarely affected by organizational stress. Eustress is experienced by 29% of the interviewed employees. The most common source of organizational stress is pressure at workplace, followed by career development, improper valorification of work performed, and lack of correctly specified objectives. Talking about private stress, 45% employees sometimes suffer from private (personal) stress, 25% - often, while 2% said they've never been affected by stress in their personal life. Through open questions there were shown that usually there are no measures taken in order to reduce stress at workplace.

Another research was done by Mitovski, A. in 2008, within the organizations on the territory of Belgrade. Both the "opinion" of the employees and the "opinion" of the human resources specialists working in those companies were analyzed.

The qualitative analyze of the answers on "How is stress reduced within your company?" shows that 78% of the interviewed claim that in their organizations stress is not managed at all and they have no trainings regarding organizational stress. The other 22% claims that the employees try to find by themselves a way to cope with stress, and they usually do that by long and frequent pauses, or by team-buildings and discussions with their managers and co-workers.

On the other hand, human resources professionals claim the following. There is no individual work with employees in order to have an anti-stress therapy. They are conscientious of stress problem within an organization, but they still point more field of employees' development. There is a wide range of trainings offered to employees, such as trainings dealing with coping skills regarding stress, but also communication trainings, trainings for adaptation and similar fields related to the essential stress factors at workplace. There is also a wide range of activities helping employees to know each other better and to support each other, such as outdoor activities (bowling, billiard, skating etc) and parties. These activities especially help in improvement of internal communication, and people like them. When a problem occurs, employees will contact human resources department, mostly when they are interested in promotion or in change of their workplace. This leads to an individual work with the

employee, but still not in order to reduce stress, because it is designed only to find a proper job position for that person and in order to offer him all the necessary tools for better performance at a certain job position.

Talking about motivators, an empiric research was done by Mitovski, Der Radivojevic, in summer 2009, in which managers and non-manager employees on the territory of Belgrade have been interviewed, on the topic of the importance of motivation factors influenced by stress during economic crisis. A research was done on 60 interviews, and there have been compared the importance of motivators in normal non-crises situation with those aroused in economic crisis period, and the following results have been obtained.

Under normal non-crisis conditions the most important motivational factor is personal development, followed by professional development, and an interesting job. While during the crisis these motivators are quite changed, and the basic, most important motivation factor becomes job certainty, followed by a satisfying income, and benefits. This shows us that under the influence of economic crisis, non-material factors (such as personal and professional development, interesting job) have been replaced by material factors (such as job certainty, income, benefits). The same source confirms that 35% of interviewed employees consider certain, regular and satisfying salary that will provide financial support for their family and pleasant family atmosphere representing a secure job. 15% consider an unlimited-period job contract as a secure job. While 15% consider that a secure job does not exist. Personal satisfaction with job was represented as healthy workplace environment by 17,39% of the employees, while the same figure represented ethical interpersonal relations. 8,7% would be satisfied by their job if there would be more engagements. While following working conditions were represented by 10%: flexi-working hours, modern solutions for everyday activities, wages, more pauses, better superiors, goal orientation, benefits, clear tasks, clear vision, greater responsibility, and other.

### **Concision**

Nowadays, working stress is the fastest growing cause of absence from work. Pressure at workplace, career development, inadequate recognition of effectuated work, hand bad defined goals and requirements are some of the most frequent causes of organizational stress reported by employees. Therefore, employers should consider stress at workplace as a serious problem and they must take measures to prevent employees suffering stress arising from their work. Therefore arise the need for investment in organizational stress management.

People need interesting job, adequate job conditions and adequate chance to feel as being valuable. Stressing situations at workplace have different effects over work performance. The contribution to organizational success that is not valued, leads to lack in terms, bad productivity, inefficient decision making, and absenteeism.

The essence of human capability to function correct is daily ability to coordinate pressure that emphasize us. One has a need for a certain level of stress, which will make his life interesting. But stress stages should be controlled in the best possible way. The level of optimum stress varies from person to person and from a situation to another. Those that like constant changes in their life would be stressed by a monotone activity, and vice verso.

Factors that can lead to stress are unpleasant, hazardous or jeopardized sensations, pleasant, intensive and uncertain reasons for happiness, even absence of sensation.

Executives and employees are valuable assets.<sup>116</sup> If stress within organization is effectively managed, and employees are movtivated properly, they can show great performance in their work, which leads to decrease in absenteeism and in different costs, and an increase in organization's productivity, profitability and competitivness. When everyone within the organization performs at their best, both the organization and its workers have a benefit.<sup>117</sup>

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<sup>116</sup> Mitovski, A., Näsulea, Ch, *The Influence of Organizational Stress on Negotiation* – Management, Innovation and Development, Vrnjačka Banja, 2009

<sup>117</sup> Mitovski, A., Näsulea, Ch, *The Influence of Organizational Stress on Negotiation* – Management, Innovation and Development, Vrnjačka Banja, 2009

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**DOC. DR. SASA ZECEVIC, Docent**

PhD Sasa Zecevic was born on 24<sup>th</sup> of September 1967 in Berane, Montenegro. He finished primary and secondary school in Belgrade. After his military service in 1988, he enrolled to the Faculty of Mechanical Engineering in Belgrade – major in Thermotechnics, graduated in 1996 and acquired the degree of Graduate Mechanical Engineer of Thermotechnics. He started his postgraduate Master's Studies in 2002 at the European University in Belgrade. He successfully completed his Master's Studies by writing his master thesis *International Management with Emphasis on USA: Case Study HP (Hewlett-Packard) and Microsoft* and thus acquired the Master of Science Degree of International Management of Information Systems. He finished defended his PhD thesis at the European University in 2008, titled *Management of Information Technologies with Emphasis on Banking Information Systems* thus acquiring the PhD of International Management.

In 1996, PhD Sasa Zecevic started working in Military Service of National Bank of Yugoslavia as a programmer of banking information systems. In 2005, he became independent associate for technology of information systems in Serbian bank in Stock Company Beograd (successor of Military Service of NBJ, YU GARANT Bank). After successfully defending his PhD thesis in 2008, he was chosen for an Assistant Professor at the Faculty of European Business and Marketing, at the European University for Informatics and Electronic Operations courses.

PhD Sasa Zecevic is author and coauthor of academic and scientific works published in magazines and he participated in number of scientific gatherings in the field of informatics and electronic operations. Also, PhD Sasa Zecevic participated in realization of many projects in the field of information technologies, especially banking information systems.

## **INFLUENCE OF IT DEVELOPMENT ON BANKING OPERATIONS DEVELOPMENT**

### **Abstract**

*Modern financial organizations use information technology (IT) in executive and managerial processes. In executive processes it automates routine operations, and in managerial processes it provides support for managerial decisions. In both of these domains human activity is rationalized and facilitated. Today, information technology in organization is a system which includes computers and communication devices and all the knowledge and methods required for its use.*

*Selection of e-banking offers has expanded drastically in a short period of time. Via personal computers or mobile phones, banks offer to their clients: insight into their account balance, turnover, statement of account changes, receiving and sending personal messages, payment of pay order obligations with current dates and dates in advance.*

*The advantages of electronic services compared to classical banking (desk banking) could generally be viewed through unlimited time and space, speed of transactions, lower prices and wide range of banking products and services.*

### **Key Words**

*Bank, information technology management, business, strategy, information system, client, database, computer, e-banking, e-bank, electronic business operations, electronic services.*

\* \* \*

Great changes in economical, technological and social development have happened in the last couple of years, which also influenced the way financial institutions and their organization worked. These changes primarily refer to:

- **Deregulation of banking operations** – this term implies liberalization of operating conditions in a country and on an international market. By removing the financial barriers, more flexible operations are enabled as well as their greater market competition.
- **Information and communication technologies development** – advancement in the field of informatics enabled adjustment of banking operations to the client needs, more quality bank managing, as well as the emerging new services, or banking products.
- **Globalization of financial market** – strengthening the business activity of domestic banks with worldwide banks. Liberalization of national banking regulations, information technology development, increased need for banking services and products and increased company needs for servicing on a global level, have influenced the process of globalization.
- **Instability and risk** – instability of a single economy and national financial systems and growth of interconnection between the economies on a global scale also conditions the increased uncertainty and instability to which banking institutions have to adapt. That is why in the core of success of a bank lies quick adaptability to instability and changes in an environment.
- **Increased client demands** – over time, companies and people have become more computer literate and prepared for evaluation of certain banking services. From this point of view, the best banks are the ones which are able to better adapt to the user requests, the banks that have a better marketing strategy.

Changes in bank environment and changes in banking management, the business orientation of a bank, occurred simultaneously. This primarily refers to:

- 1) **Banking marketing** – acceptance of banking marketing enables a bank to meet with different client demands. Starting from quick changes, the bank environment needs to adapt to those changes, which enables strategic marketing concept.
- 2) **Financing with a variable interest rate** – in a quick and constantly changing environment, operating with a variable interest rate represents one of the ways of parrying uncertainty and market change.

- 3) **Project and corporate economy financing** – if the uncertainty rate is high, a bank redirects itself to the evaluation of single company businesses and to the profitability of financing such businesses, not on the financing of the whole company business.
- 4) **Electronic banking** – form of banking in which resources are transferred through exchange of electronic signals between financial institutions and these institutions and clients, instead of operating with ready money.
- 5) **Supervision** – supervision of the banking operations especially becomes important in maximal liberalization, which on one hand is done by the bank itself thus strengthening revision functions and internal controls, and on the other hand it is done by a central bank or other authorities in order to achieve balance between single bank goals and general socio-economic goals.

Greater deregulation in the banking sector and greater significance of information and communication technologies lead to introducing new distribution channels of banking services, electronic banking and Internet banking in the first place, as their most expressed form.

Information and communication technologies development enabled classical banking transformation, which implies real time data transfer and data processing. Information technologies enable reduction of financial transaction costs and the communication itself, which influences the reduction of end user services costs.

Information technologies enable creation of virtual banks (which do not have physical branches and which have a minimal need for staff) and more frequent use of electronic money, which in the end enables creation of non-banking institutions, which would also offer banking services. The basic effect of information technology development is the increasing competition in the financial market, because of the easier access to information which are offered by the service providers to the users.

Option for banks to engage in electronic banking is also conditioned by keeping current and also gaining new clients. In domicile conditions, creation of electronic way of banking offers the opportunity for the bank to gain leader position.

It should be taken into consideration that the price of electronic banking services stands only around 30% of the traditional banking costs services. External factors of electronic banking creation are the

growing client demands for cheaper services, simpler access to services, as well as growing client knowledge of the information technology and the possibilities of simplifying regular activities and time saving.

The need for rationalization in traditional banking business refers to the rationalization of the number of employees, bank network location, business costs and transaction saving. In contrast to the traditional banking, the need for greater number of employees is reduced in the modern electronic banking, and the required personnel structure is changed. It is necessary to invest in highly educated personnel, whose knowledge would not only be based on understanding classical banking, but also on modern trends in information technology and telecommunications. Reduction of the number of employees affects the number of required branches, or desk locations in traditional banking. This directly leads to reduction of building rent costs, investment maintenance costs and overheads. The final result is customer service cost reduction, or transaction economy (transaction cost reduction compared to the classical distribution channels). Of course, lower costs of electronic transactions will turn into saving only if a great number of transactions are moved from classical channels to the electronic or online channels.

Today, we can ascertain that information technology has a dominant influence on banking operations development and on banking products development. NBS regulations are advantageous for electronification of banking operations, which is best described with the cessation of usage of cheque as a means of “deferred” payment and the beginning of rapid and mass use of the so-called “plastic money”, that is credit cards as a substitute for this payment method in Serbia. Today, beside all the mentioned types of products that banks have in their selection, web credits have also come out for the first time, and “retail” clients no longer had the obligation to come to bank desks in order to realize their credit requirement. Therefore, electronic and information technology influence on development and banking operations is extremely high, it moves the limits of “classical” banking, banks are increasingly turning to electronic ways of operating, considering the fact that these means of communication with clients enables greater rationalization of operating, as well as faster and more orderly client servicing.

Technology promotes new view on financial markets, because it *de facto* enables 24-hour global availability via the interconnected networks. Solutions need to connect technological knowledge and tradition in order to create preconditions for the 24-hour banking, which has two aspects:

- 24-hour retail banking, which is based on automated teller machines (ATM), higher level electronic desks (electronic teller), POS terminals (point of sale), home banking, internet and mobile banking;
- 24-hour wholesale banking based in New York, London/Zurich, Tokio, which addresses larger clients, correspondent banks and governments.

Both wholesale and retail 24-hour banking process messages with client orders, transactions and accounts online. This, in turn, requires first class network which constantly uses updated software, as well as possibilities for real time analysis and evaluation. It is assumed that management has reliable input data on assets and liabilities of a bank, incomes and expenses. In countries where the law allows it, banks combine commercial and investment activities under one roof. This kind of banking has become known as universal banking.

In an environment of globalized financial market and rapid development of information technologies, banks are in need of “recognition” on the market in order to take a convenient position. Recognition comes from the abilities to develop and sell products which the branch competition has not developed yet.

One of the important elements necessary for modern bank management is understanding banking techniques and technology. From the highest to the lowest level, management decisions need to be fast, decisive and appropriate, which implies complete knowledge of the way in which a decision would be realized, who would be realizing it, what period and what would the consequences or results be for the bank or its separate parts, as well as the way in which carrying out certain decisions would reflect the bank balance. Apart from complete knowledge of banking techniques and technology, modern bank managers need to have additional knowledge in the field of management.

The basic features of electronic banking are:

- Individuality
- Mobility
- Time and place independence

- Flexibility and interactive work

The advantages of electronic banking are many:

- Less employees means better service quality
- Number of organizational units is reduced, while at the same time possibility of covering a greater territory is increased
- The number of service users is much greater
- Commissions are reduced
- Service availability 24 hours a day, 365 days a year
- Data processing and transactions are almost instantaneous
- Stronger bank competition

Electronic banking development in Serbia was also influenced by social and political developments not so long ago, which as a result have more modest business indicators compared to the surrounding countries.

When evaluating e-banking in Serbia, it is important to compare the situation in this area of the country with developed countries on one hand, and on the other to compare it with other areas in our country. In economically developed countries, participation rate of e-banking in payment operations is very high (e.g. in France 70% and 80%), and much lower in Serbia (around 1/3). In order for Serbia to reach economically developed countries, it is necessary that electronic system includes as many companies as possible, all the public institutions, trades and all the citizens. Compared to other fields in Serbia, e-banking is relatively well developed and even more importantly, it shows tendency for further intensive development. Once, Serbia had been lagging behind in this way of business, but today that is not the case. Today in Serbia, the bank “flood” and the quality of e-banking that some banks offer have enabled the client to choose the bank that best suits the needs.

The advantages of electronic services compared to classical banking (desk banking) could generally be viewed through unlimited time and space, speed of transactions, lower prices and wide range of banking products and services.

In modern banking, great amount of data is exchanged with different participants every day. What usually first comes to mind, communication with the clients, represents only part of this data transfer. On the other hand, even though not so obvious, exchange

with different subjects (state authorities, wages system, associations, public companies, etc.) is equally important.

It appears that the use of XML standard enabled further data exchange between open systems. The possibility of relatively easy transfer between technologically different systems, contributed even more to those who search for data. The National Bank of Serbia is one of the banks which started requiring much more reports than before, clients started requiring statements of their accounts, and preconditions for the start of Credit Bureau have been created... All the other standards were a bit repressed and mostly existed in big payment systems (big enough to define their standards), such as for example VISA and SWIFT. These systems open only if necessary, so it is understandable why they remained using their own way of communication.

Apart from speed and reliability (continuous transfer, no matter the technical and other problems), safety is one of the most important aspects of data exchange. Unless unaltered data is transferred to the one it is meant to be transferred (and only to that person), the bank could have great problems in operating. That is why great care is taken when dealing with this way of transfer.

As it has already been said, every bank with different business subjects exchanges data. It is being done through different networks which are more or less open (logically open, not in a sense of physical transmission channels). The most closed systems are payment card systems, switching centers for domestic and international payment operations. Access to these systems is very limited, communication is encrypted and physically done through private networks. Organizations such as credit bureau have a bit more open and mass approach. Systems with the biggest openness are, logically, the ones intended for clients.

A couple of examples of everyday data exchange the banks do, with their basic features are given in the chart. This presentation is very simplified and does not show all the business problems and risks. For example, if a bank enables its client to pay with a card via e-banking, connection between two systems which are at the opposite ends of the openness scale is required, which requires specific solutions.

<b>More open</b>			<b>More closed</b>		
Exchange with geographically dislocated parts of a bank	Wages systems and payment card systems	NBS reports	Credit Bureau	E-banking for legal entities	E-banking for individuals
	VISA, MasterCard, RTGS NBS (domestic wages system) SWIFT (international wages system)				
Financial and non-financial transactions	Financial transactions	Non-financial transactions	Small number of participants	Large number of participants	Very large number of participants
Small number of participants	Small number of participants (private locations, not end clients)	Small number of participants	Small number of participants	Large number of participants	Very large number of participants
Different amounts, including large ones	Different amounts, including large ones			Different amounts, including large ones	Small amounts
Combination of general and specific protocols, standards and crypto techniques	Specific protocols, standards and crypto techniques	General protocols, HTTPS, smart cards	General protocols, HTTPS, smart cards	General protocols, HTTPS, smart cards or other authentication techniques	General protocols, HTTPS, smart cards
private networks			public networks		

*Basic features of data transfer between a bank and other participants*

Data safety standards for each of the mentioned groups are the following:

### **1. Exchange with dislocated parts of a bank**

This is one of the most popular transfers that are performed during the day. It is common knowledge that almost all the banks that operate in Serbia have a centralized information system, which means that for every transaction they need to address the central database. Safety techniques are built in certain applications and/or are using the general protocol (https). Encrypting is only partly supported and usually does not include data that is transferred outside of the basic application (text or scanned documents, emails, etc.). Communication is established through private networks.

### **2. Wages systems and payment card systems**

This group includes systems that have the longest tradition in applying safety techniques and these systems are probably the most developed ones in the field. Even though the transfer is predominantly done through private networks, encrypting has become common, strict access control, dual control principle (e.g. neither of the employees knows the cryptographic key, only one part of it), very sophisticated and expensive hardware security modules (HSM), etc.

One of the important differences between the wages system (e.g. RTGS) and payment card system is that the former is accessed through a bank counter (or via the Internet through encrypted channel), and the latter is accessed through any trading POS (Point of Sale). Particularly dangerous is the fact that all those places can preserve card number data, which can later be misused. This problem is exactly the one that was noticed and special attention was paid to the new safety standard in payment card system (PCI DSS). Among else, it requires that card numbers must be encrypted, and that they also have to be encrypted during the transaction to public networks. The standard itself is very wide and comprehensive and it includes all aspects of critical data protection in keeping, processing and transfer.

### **3. NBS reports**

Business banks send vast amounts of reports to the central bank daily, with which they control and estimate their operations. These reports are sent in XML format, usually through a private network. Since the mid 2009, instructions and rules of reporting have been expanded, so that now every report also contains sender's

electronic signature. Signing is done with the help of certificates on smart cards which are issued by the Serbian Post Office.

#### **4. Credit Bureau**

Data exchange between business banks and Credit Bureau is done in both ways. Banks send data on their clients and their orderliness to the Credit Bureau (in package), and during the checking (e.g. for credit approval) online questionnaire is to be filled in through a certain application. Communication is encrypted, which is necessary because it is done through public networks, and authentication is performed using smart cards.

#### **5. E-banking**

Data transfer depends on the application that is used. However, considering that public networks are being used, communication is always encrypted (HTTPS), and smart cards or another forms of authentication the bank chooses (codes, tokens, mobile phones, etc.) are used for authentication.

In Serbia, almost all business banks, through different channels, offer some of the forms of e-banking to their clients. However, with careful analysis of the offered services, functional and technological differences of particular platforms, which are firstly results of different perspectives of further development and importance of these services, can be seen.

Many banks have, by moving payment operations into business banks as a part of their offer, also offered electronic services intended for legal entities and individuals as basic sets of services which they would advance and update.

In the beginning, basic set of services implied electronic payment operations in the country for legal entities, and then banks started to offer applicative solutions intended for individuals, so that the offer would currently be completed by corporative solution of e-banks, intended for operating abroad.

Banks have successfully joined the new systems of inter-banking accounting under the worldwide principles: RTGS for priority payments and high value payments, and net system for low payments. They organized undertaking company's transfer accounts and payment operations, giving a higher level and quality services, with the affirmation of the concept "meet the client's needs".

Current basic information systems (core-banking) are now being updated with a new level of applications to support electronic operating with economy and people.

Current IT infrastructure is not undeveloped. Majority of banks floods its current and potential users with advertisements in which they show themselves as leaders in the field of e-banking, while emphasizing that they are the best solution for e-banking. Future tendencies go towards the idea that all subjects are electronically connected and that banks broaden their selection of services which are offered electronically, with optimal change dynamics. General competition encourages certain banks to offer as many advantages as possible for their clients.

Selection of e-banking offers has expanded drastically in a short period of time. Via personal computers or mobile phones, banks offer to their clients: insight into their account balance, turnover, statement of account changes, receiving and sending personal messages, payment of pay order obligations with current dates and dates in advance. Also, possibilities such as using payment operations services via the ATM, payment cards, POS bank terminals, call centers and mobile phones (SMS), have also appeared.

The government programmes support in the field of payment cards (card business) is very clear. The government has a direct interest to give this support, because this kind of transaction represents a legal cash flow which carries fiscal note and tax collection with it. Most of the banks offer internationally valid cards (Visa, Diners, Master, etc.), but currently in Serbia, they can only be used for cashless payments, while for the Internet payments they can only be used abroad (we lack certain local centers for processing these transactions). Other line of bank activities is directed to developing the system and expanding the receiving network of national cards (DinaCard).

In the field of electronic banking, special attention is paid to security standards. Today, in corporate banking, standard represents PKI, the infrastructure of a system with public keys, which is commonly based on asymmetrical and symmetrical use of coding systems and which offers complete privacy protection, authenticity and integrity and provides irrefutability of transactions; it includes all the basic cryptographic functions of electronic operations which is also defined by the Electronic Signature Law.

This technology enables completely safe electronic operations, and that provides relevant preconditions for further development of e-service, as far as the technical part of the application is concerned. In all this, legislation is very important, that is, passing laws and regulations which would define this area of business and create a legal framework for further development.

However, just adopting and interpreting the Electronic Signature Law does not have direct implications on electronic operations, because the electronic banks are outside of the range of this Law, simply because the relations between the clients and the bank are defined by a contract. However, the law itself has great implications in passing some new laws, primarily the Electronic Invoicing Law, Electronic Government Law, Electronic Documents Law, etc. that would arrange these areas and set a legislation for further development of electronic banking in Serbia.

Currently, applicative solutions for electronic operations for legal entities and individuals have activities exclusively in domain of payment operations, in which clients are offered the possibility for all kinds of payments in the country and abroad through an e-bank, and are given the opportunity for obligations settlement, that is, payment of different kinds of accounts for individuals.

Corporate e-banking and electronic banking development, intended for individuals, which follows and is already applied in developed countries of Western Europe, is a supplement to the basic set of services that are offered today in Serbia through e-banks. This set of services through related services goes for complete closure of the business process; it gives the opportunity for the whole business process to be done from an office or home without going to the bank.

It enables exchange and document controls (currently obligatory in foreign exchange and trade) with digitally signed electronic documents, and therefore completely valid and identical to the hardcopies.

With rapid development of technology, immense possibilities of further development of electronic banking in the world and in Serbia are opened. Following the world trends, it is almost certain that the next step in electronic services development in Serbia would be the so called M-Payments and also the introduction of mobile phones as way of payment. Today, mobile phones have immense possibilities

incorporated and have long since stopped exclusively being means of communication between two users.

Basics for further development of electronic services represent mobile ways of payment via mobile phones – Mobile payments/mPayments solutions, or possibly mobile banking, are currently offered at the market.

No matter which solution a bank is going to use, it is certain that the basis of further development of e-banking will be the mobile phone. Clients are enabled to pay their bills through a mobile phone – primarily post paid mobile phone bills, and secondly stable phone bills, electricity, utilities, wireless Internet, etc.

It is necessary to provide the people of Serbia with PayPay and other services for safe Internet payment. Current bylaws on exchange transactions do not include the possibility for online payment of products and services on the Internet.

PayPal is one of the most famous services which offer safe online payment and funds transfer via the Internet, with the so called electronic money. In order for us to be able to use PayPal, it needs to be registered and officially approved in our country. There are more and more web sites which, for safety, support only electronic money, therefore Serbia lacks one very useful convenience. That is why it is necessary for the Ministry of Telecommunications and Information Technology Society have to take measures, so that payment with electronic money would come to life.

For further development and greater use of the advantages of e-banking and information technologies, certain infrastructure is necessary, the possibility of wide approach to the network and critical amount of computer and Internet users.

Key precondition for e-banking growth is education. In Serbia, about 30% of households use the Internet, but mostly for emails, and less for e-banking. Banks, telecommunication companies and the country have to work on education in order to increase the percentage of e-banking usage. Our country needs to help and to participate in more complete education of people concerning electronic ways of payment, because that is the first step without which e-banking would not be possible. Information technology education is a premise, a necessary condition for further development of the country.

It is necessary to pass and amend the legislation which regulates this area in order to develop electronic way of operating.

Serbia is one of the last countries to pass the Electronic Signature Law, which made it even more difficult for the banks to operate. In companies for information systems design and development, it is said that Serbia needs legislation that would arrange relations and responsibilities in more complicated relations of e-commerce, where many sides participate – merchant, customer, supplier and their banks. It is estimated that this kind of legislation would contribute to the progress of domestic electronic way of operating. Existing legislation and solutions it offers currently make faster development of electronic services difficult and represent certain brake to further development, because fields from complete domain of electronic operations, which would ensure faster development of electronic services, are not regulated.

Electronic banking in Serbia is still far from reaching its essence, but with daily growth of electronic banking, we are slowly but surely reaching economically developed countries of Western Europe.

Development of electronic banking in Serbia has certainly been marked by the social and political happenings not so long ago, which results in more modest business indicators compared to countries in the region. Currently in Serbia, electronic banking is used by a small number of clients and for now the pace of its growth cannot be foreseen, which imposes the need for banks to invest considerable funds into development, marketing and education of clients.

If the rates of electronic transactions are made lower than the physical desk transactions, electronic way of payment would become the most used one. In global financial crisis, when it is necessary to reduce the costs of operating by reducing the number of branches or agents, electronic communication with the clients represents the right solution. We should aspire to leadership in this area and compare ourselves with the modern world, because that is where the room for progress is immense.

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# Engineering management





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## **OIL INDUSTRY TECHNOLOGICAL AND ENERGY MANAGEMENT IN SUSTAINABLE DEVELOPMENT FUNCTION**

***Abstract:** In the first part of the paper we show oil industry development, during the 30's decade of the last century, and the most important trends for mid and long period of development. Oil refinery processes over the world and motor fuels EU specifications (1994-2009.) are presented, too. Also, in function of reduction sulphur contents in motor fuels CO<sub>2</sub> emissions are presented.*

*We provide data on the current primary energy consumption, as well as the forecast - till 2030. We also provide data on crude oil and oil derivatives consumption, according to geographic regions of the world. Also, in the paper we present development catalytic processes in the oil industry, as the most important oil refinery processes.*

***Key words:** oil industry, technological and energy management sustainable development, oil derivatives consumption, oil derivatives quality, refineries capacity structure, EU specifications, primary energy consumption, crude oil consumption, catalytic processes.*

### **1. INTRODUCTION-The evolution of oil downstream in the last part of the 20th century**

The oil industry as a whole in the last three decades has been especially influenced by a series of political and economic distresses and turmoil's: two serious oil crises in 1973. and 1979., causing an economic downturn on a worldwide scale, the wars against Iraq in 1991. and 2003., with little less impact and last, but not least, an awakening of awareness regarding the degradation of our environment.

All this factors shaped the world's petroleum consumption structure between 1970. and 2000., as shown in Table 1<sup>118</sup>.

**Table 1:** Evolution of the structure of the demand in petroleum throughout the world (market economy countries) between 1970. and 2000.

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<sup>118</sup> C. Marcilly, Oil & Gas Science and Technology – Rev. IFP, Vol. 56 (2001), No. 5, 499-51

	1970		1980		1990		2000	
	10 <sup>6</sup> tons	%	10 <sup>6</sup> tons	%	10 <sup>6</sup> tons*	%	10 <sup>6</sup> tons	%
Gasolines	492	25.4	626	26.6	750	26.8	876	26.2
Middle distillates	530	27.4	721	30.6	950	33.9	1163	34.8
Heavy fuels	608	31.4	645	27.4	500	17.9	426	12.8
Others	307	15.8	363	15.4	600	21.4	875	26.2
Total	1937	100	2355	100	2800	100	3340	100

Middle distillates: jet fuels, heating oil, diesel oil.

Others: refinery gas, LPGs, naphtha's, solvents, lubricants, wax, bitumen, petroleum coke, etc.

\* Approximate values.

The following landmarks stand out from the table:

- the heavy fuels sector dropped rapidly, from 30% in 1970. to 13% in 2000. (a sharp and massive drop in the demand of electric power stations). This decrease should continue but at a slower rate;
- by contrast, the part of light products increased during this period; especially that of middle distillates (jet fuels and gas oils) which increased from 27% to about 35% between 1970 and 2000 and is likely to continue to grow, mainly due to the increased number of diesel engines among the European automotive population, whereas the proportion of gasoline has remained fairly steady since 1970.

In order to handle changes in both the quantity and quality of demand, European refining has become more complex (Table 2), stepping up conversion capacity (FCC in particular) and installing new hydrotreatment (reduction of sulfur (S) content in fuels), hydrocracking and gasoline production units. The trend is even more strongly marked in the Asia-Pacific region due to the fast development of certain countries in the zone (South Korea for instance). Figures were noticeably high in 1999 compared with 1989, and this was also due in large part to the fact that China has recently been taken into account (China has over one third of the FCC units in the Asia-Pacific region). In North America, hydrogenating processes (HDT and HDC) continue to progress, whereas the others (cracking and special processes) appear to be stagnating. On a global scale, world refining capacities showed a downturn in the eighties due to the petroleum

crises of the seventies and the resulting economic slump. Refining capacities picked up again in the nineties under the stimulus of the reduction in the price of gasoline and the economic expansion of South-East Asia, among other things.

**Table 2:** Development in the structure of world refining capacities between 1979 and 1999 and for the main geographical zones in Mt/year (the zones that did not have a market economy in 1979 and 1989 are not included in these two periods but are integrated in 1999: former Soviet Union, China, North Korea, several Eastern European countries, etc.)

	1979				1989				1999			
	N. Amer.	W. Eur.	Asia-Pacific	World	N. Amer.	W. Eur.	Asia-Pacific	World	N. Amer.	W. Eur.	Asia-Pacific	World
HDT	437	346	214	?	523	311	240	1290	577	404	374	1835
FCC	260	49	30	400	304	88	51	531	298	106	125	688
HDC	46	6	1	?	72	15	14	130	84	34	35	201
Atm. dist.	997	998	520	3210	870	832	500	2840	923	723	982	4077

Source: Oil & Gas Journal

At the end of 1999, the world refining capacities were a little below 4.1 Gt, with a low growth rate of about 10% over ten years (3.74 Gt in 1989).

The gradual realization, at the end of the 1970s, of the need to protect the environment against the noxious emissions produced by human activity had a strong impact on refining and on motor fuels in particular. The main measures taken in Europe were lead out of gasoline, which became total as of 01/01/2000., then taking sulfur out of gasoline and diesel fuel (Table 3)<sup>119 120</sup>. It is currently estimated that noxious gaseous emissions from transport vehicles have been lessened by a factor of around 100 compared to 1970 levels.

**Table 3:** Changes in European motor fuel specifications from 1994. till present

<sup>119</sup> J.F. Larivé, Pétr. Tech. 435 (2001) 101

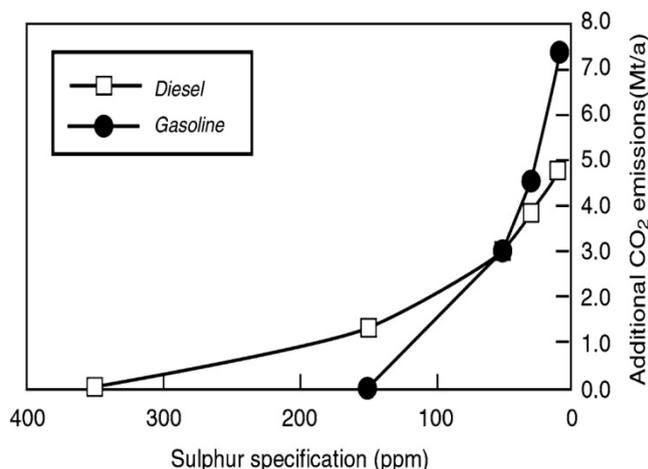
<sup>120</sup> J.P. Gaessler, Pétr. Tech. 387 (1994) 58.

Unleaded gasoline 95/85, EN228	1994	1995	1996	2000	2005	2009*
Sulfur, ppm mass, max	1000	500		150	50/10	10
Benzene, vol%, max	5	5	5	1	1	1
Aromatics, vol%, max				42	35	35
Olefins, vol%, max				18	18	18
Oxygen, vol%, max		2.7	2.7	2.7	2.7	2.7
Diesel oil (standard grade), EN590	1994	1995	1996	2000	2005	2009*
CI, min	46	46	46	46	46	46
CN, min	49	49	49	51	51	51
Sulfur, ppm mass, max	2000	500	500	350	50/10	10
Density, kg/m <sup>3</sup> , max	860	860	860	845	845	845
T95, °C, max	370	370	370	360	360	360
HPA, mass%, max				11	11	11

RVP, Reid vapor pressure; E100, temperature of 100% distilled; CI, cetane index; CN, cetane number; T95, temperature of 95% distilled; HPA, heavy polyaromatics.

\* proposed values

In the 1990s, it was increasingly realized that the change in climate caused by greenhouse gases, such as CO<sub>2</sub>, constituted a risk. Twenty-one percent of world CO<sub>2</sub> emissions come from transport and 8% from the oil and gas industry. Altogether, European refineries annually produce 100 million t of CO<sub>2</sub>, which amounts to around 2.9 and 2.5%, respectively, of CO<sub>2</sub> production (3.5 billion t) and of all the greenhouse gases produced in Europe (4.1 billion t) [3]. The orientation of the main refinery products toward higher average levels of hydrogen and lower levels of sulfur has inevitably resulted in an increase in the CO<sub>2</sub> produced by the refinery, and this factor is all the higher, as the crude processed is heavy and consequently richer in carbon and generally in sulfur. As shown in Fig. 1 [3], the reduction in sulfur content of motor fuels from 2000 specifications to 2009 specifications will lead to a 5% increase in CO<sub>2</sub> production by European refineries in the case of diesel fuel and to an increase of over 7% in the case of gasoline. But this will not have a positive impact on the earth's atmosphere unless the excess CO<sub>2</sub> emitted is more than offset by commensurate gains in the consumption of refinery products, particularly where transport is concerned.



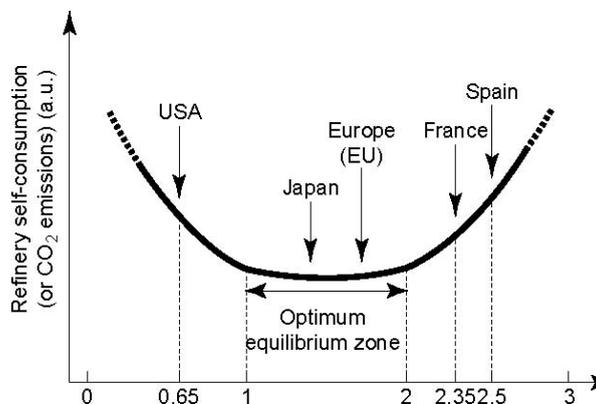
**Figure 1:** Increase in CO<sub>2</sub> emissions by European refineries as a function of the reduction in the sulfur content of motor fuels.

It is important to mention here the impact of the middle distillates/light distillates, i.e. gasoline's (MD/LD) ratio, which normally has a value between 1 and 2. Between these two values, the refinery modifies the gas oil/gasoline ratio of its fuel production by playing on the nature of the crude supply and the cut points of the products, but globally, CO<sub>2</sub> emissions remain more or less constant.

The MD/LD ratio equal to 2 corresponds to a proportion of diesel engines of the automobile population of about 25%. In 1999, a country such as France had already a 33% proportion of diesel engines (MD/LD ratio of 2.3 approx.) and currently is about 42%. By contrast, the American situation corresponds to an unbalanced market in the other direction, with an MD/LD ratio that is well below 1 (about 0.6). It is therefore interesting to find out what happens to the CO<sub>2</sub> emissions on either side of the previous operating range.

Figure 2<sup>121</sup> shows that any significant imbalance between the gas oil and gasoline productions lying either on the "all gas oil" side or on the "all gasoline" side of the "optimum equilibrium" range generates a rapid increase in the CO<sub>2</sub> emissions in the refinery.

<sup>121</sup> J.B. Sigaud, *Pétrole et Techniques*, 422 (1999) 89.



**Figure 2:** Impact of a change in the ratio between middle distillates and light distillates on refinery self-consumption (middle distillates = jet fuel + diesel oil + fuel oil; light distillates = gasoline's).

This confirms we are still far from a rational global approach and that much progress is to be made in reducing worldwide CO<sub>2</sub> emissions due to refineries, but, somehow, energy policy makers are doing little to bring MD/LD ratio to its optimum zone on a global scale.

## **2. THE FUTURE OF PETROLEUM RESOURCES**

Due to all this factors, oil and gas role as a vital source of energy remains largely unchallenged. Hydrocarbons will go on to play an important role in energy consumption by mankind because of their attractive physicochemical properties, their easiness of use and large investments already granted for their valorization.

Fossil fuels will continue to satisfy most of the world's energy needs, with a share consistently over 85%, and oil will continue to be in the leading position, with its current share of 37% falling only slightly to 33% by 2030 (Table 4). Gas is expected to grow at fast rates, while coal retains its importance in the energy mix.

**Table 4:** World supply of primary energy

Levels				Growth		Fuel shares			
million tons of oil equivalent (mtoe)				% per annum		%			
	2006	2010	2020	2030	2006–2030	2006	2010	2020	2030
Oil	4,031	4,257	4,830	5,360	1.2	37.3	36.3	34.6	32.7
Coal	2,989	3,298	3,993	4,655	1.9	27.6	28.1	28.6	28.4
Gas	2,400	2,637	3,239	3,993	2.1	22.2	22.5	23.2	24.4
Nuclear	731	762	864	1,022	1.4	6.8	6.5	6.2	6.2
Hydro	251	278	350	427	2.2	2.3	2.4	2.5	2.6
Biomass	349	408	537	674	2.8	3.2	3.5	3.8	4.1
Other renewables	61	81	150	258	6.2	0.6	0.7	1.1	1.6
<b>Total</b>	<b>10,813</b>	<b>11,720</b>	<b>13,964</b>	<b>16,389</b>	<b>1.7</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: World Oil Outlook 2008, OPEC Secretariat, Vienna, 2008

At the end of 2007., world proven crude oil reserves stood at 1,204,182 million barrels (191,465 million cubic meters). Depending on the growth scenarios, these reserves should cover 60 to 150 years' requirements, but their many and varied locations do pose a problem. The major part (66.5%) of the proven petroleum reserves is to be found in a geographical zone (the Middle East) where the political climate is unsettled. The world will be depending more and more on this zone in the coming decades. Moreover, most consumer zones are far from producing zones, which leads to an intensive transportation activity.

Oil demand rises by 29 Mb/d from 2006 to 2030, when it will reach 113 Mb/d (Table 5). In the medium-term to 2012, an average increase of 1.3 Mb/d annually is expected, while this yearly increase gradually falls in the longer term to 1.2 Mb/d p.a. Developing countries are set to account for most of this rise, with consumption almost doubling to 56 Mb/d by 2030. Asian developing countries see an increase of 17 Mb/d, more than two-thirds of the rise in all developing countries. Nevertheless, OECD countries and transition economies will account for 57% of the cumulative demand over this period. Moreover, by 2030, developing countries will consume, on average, approximately five times less oil per person, compared with OECD countries.

**Table 5:** World oil demand outlook, million b/d (1b = 0.159 m<sup>3</sup>)

	<b>2006</b>	<b>2012</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
North America	25.3	26.2	26.6	27.0	27.3	27.4
Western Europe	15.7	15.8	16.0	16.1	16.2	16.2
OECD Pacific	8.5	8.3	8.3	8.2	8.1	7.9
OECD	49.4	50.4	50.9	51.4	51.6	51.5
Latin America	4.4	4.9	5.2	5.6	5.9	6.2
Middle East & Africa	3.1	3.7	4.0	4.5	5.0	5.6
South Asia	3.2	4.3	5.0	6.1	7.2	8.5
Southeast Asia	4.5	5.4	5.8	6.6	7.4	8.2
China	7.1	9.3	10.3	12.0	13.6	15.4
OPEC	8.0	9.1	9.7	10.6	11.4	12.2
DCs	30.4	36.8	40.0	45.3	50.6	56.2
FSU	3.9	4.2	4.3	4.4	4.5	4.7
Other Europe	0.9	1.0	1.0	1.0	1.0	1.1
Transition economies	4.8	5.2	5.3	5.5	5.6	5.7
<b>World</b>	<b>84.7</b>	<b>92.3</b>	<b>96.1</b>	<b>102.2</b>	<b>107.7</b>	<b>113.3</b>

Source: World Oil Outlook 2008, OPEC Secretariat, Vienna, 2008

The transportation sector accounted for 49% of world oil consumption in 2005 at 38.3 million barrels of oil equivalent per day (Mboe/d), up from a share of only one third in 1971, and this share is set to continue to rise, reaching 52% by 2030. The growing importance of the transportation sector to oil demand is unsurprising, given the limited fuel switching possibilities and the expected continued growth in people's mobility.

### **Demand by product**

The most notable trend in demand by product is the continuing shift to middle distillates and light products over the entire period. This is highlighted by the fact that out of 28.6 Mb/d of additional demand by 2030, compared to 2006, almost 50% is for diesel/gasoil and another 43% is for other light and medium products. This will pose a serious challenge for refiners in the years to come. The bulk of the increase is for transportation fuels, mainly diesel oil, gasoline and jet kerosene. On the other hand, demand for residual fuel oil is

projected to remain flat while other — mostly heavy products — will expand only marginally.

Diesel and gasoline will be at the forefront of future product growth. However, diesel use increase will outpace that for gasoline so that there will continue to be a shift from gasoline to diesel in terms of both volumes and the shares of these two products in global demand). In 1999, diesel/gasoil reached parity with gasoline for the first time and has since continued growing faster. In 2006, its share in global demand was almost 3% higher than that of gasoline. Projections show a continuation in this trend to the extent that, by 2030, the difference will be almost 10%. Another product gaining share in the product slate is naphtha while the shares of jet fuel and kerosene will remain stable. All other products will decline in their shares, residual fuel oil being affected most.

A strong growth in middle distillates is mainly driven by developments in automotive diesel, which is growing rapidly in most countries, whereas gasoil growth is being negatively impacted by the shift towards the increased use of natural gas and/ or electricity and renewable energy for heating. The combined effect of these trends is reflected in the 1.9% p.a. average growth of diesel/gasoil during the forecast period. This is appreciably higher than the average total demand and above the levels for jet and gasoline. The growth is even higher in the initial period up to 2010, at 2.3% p.a., slowing down thereafter.

In Western Europe, where there is a large surplus of gasoline production, demand for this product declines. In recent times, strong gasoline demand in North America has provided an outlet for Europe's surplus. However, in the future, European gasoline demand will continue to decline and North America's ability to absorb the surplus product will diminish. As a result, the European refining industry will need to further rebalance its gasoline and diesel production.

### **3. OIL DOWNSTREAM OUTLOOK TO 2030**

#### **Medium term (up to 2015)**

Today, the downstream industry faces a series of issues, challenges and questions. They include: refining projects, supply levels of non-crude's that essentially bypass refineries, crude quality,

demand growth, the demand mix, continued move towards more stringent quality specifications and the possible imposition of carbon emissions targets on refineries.

How refining projects evolve over the next few years will materially impact the refining balance and the sector's economics. In the period to 2015, it is estimated that crude distillation capacity by 2015 could increase by 8.8 Mb/d from 2007 levels.

Distillation capacity additions should exceed requirements in each year from 2010–2013, as a range of new projects come on-stream, thereby potentially easing refining tightness and margins. However, if refining projects are delayed or cancelled, then cumulative additions will not keep pace with demand requirements, indicating no capacity excess.

While crude distillation unit additions by 2015 appear close to sufficient in the reference case, those for secondary processing units are not. Substantial further additions are needed, especially for hydrocracking and desulphurization. In particular, the gap between supply and demand for middle distillates will grow, unless more diesel-oriented projects are implemented. This evolving gap will likely drive price differentials towards a premium for diesel and could also have an impact on the absolute level of product and crude prices.

A second critical parameter is that the proportion of non-crudes in the total supply rises, while that for crude to be processed per barrel of additional product demand declines. Total non-crudes are projected to cover more than 16 mb/d of supply in 2020 and 20 mb/d in 2030, compared to an estimated 10.5 mb/d in 2007. This increasingly impacts the downstream as these streams are predominantly light and clean, and most of them bypass refining processes. In the medium-term, ethanol supply increases exacerbate the weakness in gasoline margins globally, particularly in the Atlantic Basin. Moreover, despite biodiesel growth, Europe's diesel deficit sharply widens. A further consequence is that proposed biofuels mandates are adding to the uncertainty surrounding the need for future refining investments, and in some cases, this might lead to refiners deferring major investment decisions.

A third key factor impacting refining requirements and economics over the medium-to long-term is the make-up of crude supply and the resulting quality of the global crude slate. A detailed analysis of the make-up and quality of the future crude supply

indicates that the overall global crude slate will remain relatively stable over the forecast period. It is not getting heavier, contrary to conventional wisdom. Furthermore, the results indicate that, on a global basis, the effect of any potentially declining crude quality would be of secondary importance to changes expected on the demand side.

A fourth and major driver, therefore, is the level and quality of product demand. Of central significance is the move toward distillates, notably diesel, and toward low and ultra-low sulphur fuels as the OECD regions complete conversion and non-OECD regions progressively adopt these standards.

From an environmental perspective, the issue of fuel properties has focused on lead in gasoline, and sulphur in gasoline and diesel.

In terms of lead, concerted global efforts have been made by governments and industry to phase it out, and it is expected to be fully eliminated by 2010.

With regard to sulphur, much progress has also been achieved with industry responding to the growing policy calls for low sulphur (50 parts per million (ppm)) to ultra low sulphur (<10 ppm) gasoline and diesel. The current sulphur specifications for gasoline and diesel and future projections to 2025 are presented in Tables 6 and 7 respectively.

**Table 6:** Regional average gasoline quality specifications (maximum sulphur content in ppm)\*

Region	2006	2010	2015	2020	2025
US & Canada	30	30	30	<10	<10
Latin America	650	500	300	100	50
Europe	65	15	10	<10	<10
Middle East	1000	850	200	100	50
FSU	450	450	250	85	50
Africa	800	700	330	125	120
Asia-Pacific	370	135	75	50	45

\* Regional quality specifications are estimated based on weighted averages of fuel volumes in individual countries.

Source: Hart World Refining & Fuels Services (WRFS) and IFQC, 2007.

**Table 7: Regional average diesel quality specifications (maximum sulphur content in ppm)\***

<b>Region</b>	<b>2006</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
US & Canada	110	15	15	10	10
Latin America	2	500	250	50	50
Europe	90	30	15	10	10
Middle East	8500	1600	350	265	175
FSU	800	390	225	130	30
Africa	2600	2600	680	650	650
Asia-Pacific	500	230	150	100	100

\* Regional quality specifications are estimated based on weighted averages of fuel volumes in individual countries.

Source: Hart World Refining & Fuels Services (WRFS) and IFQC, 2007.

### **Long term (up to 2030)**

The most notable trend in this respect is the continuing shift to middle distillates and light products over the entire period. The fact that out of around 27 Mb/d of additional demand by 2030, almost 50% is for gasoil/diesel and another 43% is for other light and medium products poses one of the biggest challenges for refiners. Contrary to light products, the demand for residual fuel oil is projected to remain flat while other mostly heavy products will expand only marginally. This change in product mix, along with overall product demand growth, will necessitate expansion of refinery downstream conversion capacity to increase desired product yields.

To meet future demand, a total of almost 20 Mb/d of additional distillation capacity will be required by 2030, compared to existing capacity at the end of 2007. In addition, the downstream sector will also require close to 12 Mb/d of new conversion capacity and almost 8 Mb/d of octane-enhancing units by 2030. With regard to conversion, there is a growing emphasis on hydrocracking over coking and fluid catalytic cracking units. Desulphurization requirements, dominated by those for diesel, continue to be very substantial to 2030. This is reflected in the projection that by 2030 the global refining system will

need more than 23 Mb/d of additional desulphurization capacity over the 2007 base.

To have this capacity in place, substantial investments are required in all regions. The total investment in refinery processing to 2015 is projected to be more than \$320 billion (in 2007 dollars) in the reference case, while for the entire forecast period to 2030 the figure is close to \$800 billion.

### **Impact on downstream industries**

During the coming decades, oil will still be the main source of energy<sup>122 123</sup> and will supply a large share of the fuel required by industry and virtually all the fuel required for transport. The possible scenario for refining and petrochemicals in 2015–2020 are not very difficult to imagine, except where future motor fuels are concerned.

Developments in refining will mainly be governed by the constraints of the new European specifications that will come into force in 2009 and after. Traditional modern heat engines are already close to zero pollutant emissions with the use of automotive postcombustion catalytic converters. Automotive emissions should again be reduced by a factor of 2.5 to 3 between 2000 and 2010 [3], due partly to the reduction of the sulfur content of motor fuels.

Regarding catalytic processes, the general trend will be toward a reduction in costs by improving catalyst activity, and more especially their selectivity<sup>124</sup>. The reduction of heavy fuel consumption puts conversion processes in a good position. FCC will long remain the major process for converting vacuum distillates<sup>125</sup>. Its good potential for the economic production of light olefins from C<sub>2</sub> to C<sub>5</sub>, including propylene, will be better and better exploited through improved catalysts and technology. Catalytic processes that improve the quality of FCC liquid products should be further developed and/or generalized. These involve desulfurization of gasoline on one hand, hydrogenation and in particular hydrodecyclization of light FCC gas oil (LCO) on the other hand. For these applications, improvements are expected in catalytic systems, process schemes, and technology.

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<sup>122</sup> T. Desmarest, *Pétri. Tech.* 429 (2000) 173.

<sup>123</sup> P. Jacquard, C. Bélogot, B. Bensaid, J.F. Gruson, *Pétri. Tech.* 395 (1995) 6.

<sup>124</sup> G.A. Somorjai, K. McCrea, *Appl. Catal. A* 222 (1–2) (2001) 3.

<sup>125</sup> D. Decroocq, *Pétri. Tech.* 429 (2000) 106.

In spite of its high cost, hydrocracking should develop due to the excellent quality of the middle distillates, particularly light gas oil, that it produces and for which there is a growing demand in Europe. In this respect, research will be oriented especially toward the development of more active and more selective catalysts operating at lower pressure.

In hydrotreatment, the removal of the last traces of sulfur (4,6-dialkyldibenzothiophenes, for example) from various petroleum cuts, the most difficult ones to convert by catalysis, will probably be performed in the medium term by adsorption. In spite of the spectacular progress achieved in the last 10 years, biocatalytic desulfurization is still not competitive because specifications on sulfur content have become much more stringent and also because great progress has been made in conventional hydrotreatment<sup>126</sup>.

Another challenge for the refining industry is the production of motor fuels, particularly gasoline, with some of its blending components under pressure due to restrictive environmental specifications: reformat with a high alkyl-benzene content, FCC gasoline with a high olefin content, MTBE because of its threat of ground water pollution<sup>127</sup>. These blending components could be less used in the future, which would then encourage the use of other components involving the following processes: isomerization of light paraffins (including C<sub>7</sub> paraffins), alkylation of isobutane by butenes and by pentenes, selective oligomerization of light olefins.

Growth in demand for diesel fuel could encourage recourse in the medium term to dimethylether (DME), whose direct synthesis from syngas or methanol does not pose any particular problems, and also, in the longer term, the appearance of Fischer–Tropsch synthesis units.

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<sup>126</sup> M. Colin, *Pétri. Tech.* 431 (2001) 44.

<sup>127</sup> *Pétri. Tech.* 424 (2000) 22.

#### **4. CONCLUSION**

During the present decade and probably also in the next, the refining and petrochemical industries will have to pursue the changes that have been under way for the last 30 years in order to adapt to the demands and constraints imposed by the necessary protection of the environment, by the effort to combat greenhouse gases (particularly CO<sub>2</sub>), and by international competition. Although these industries are considered to be mature, the changes will call for progress at all levels, especially with regard to catalysis.

In the longer term, well after 2020, with the gradual replacement of oil by other energy sources, a profound change and maybe a major upheaval will be necessary and it will gradually take place in these two industries and in the world of end users that drives them. From this point of view, catalysis will have a major role to play in overcoming the many technical difficulties that lie ahead, some of which will require scientific and technological breakthroughs.

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## **GLOBALIZATION OF HUMAN RESOURCE MANAGEMENT**

### **Abstract**

*This paper deals with the topic of international human resource management that is the human resource management in a global context where it demonstrates how the globalization of business in general has changed the nature of the human resource management. It also indicates to the strategy of international business, with special reference to how various approaches to international business affect the nature and design of multinational companies, and what role the international management of human resource has in this process.*

**Key words:** *globalization, multinational companies, human resource management, international business.*

### **Introduction**

The pace of globalization continues to accelerate. Markets have turned global for most goods and services; there is an increased number of cross-border investments, and also a number and value of cross-border mergers and acquisitions, international joint ventures and alliances, and finally the amount of money and the number of people that cross borders (both legally and illegally) have also rose. Thousands of companies and millions of people work abroad, outside their home countries, and millions work at home employed by foreign companies. The competition has also turned global almost everywhere in the world, which means that nearly all companies have encountered the actual or potential competition by foreign goods or services, foreign subsidiaries and local firms owned by foreign companies. Furthermore, all that contributes to business activities (including capital, ideas, technology, spare parts, insurance, legal services, stationary and of course the employees) to become accessible anywhere in the world, according to their quality, price, and the speed at the world level, which induced creating global standards and competition in literally every branch and industrial sector.

It means that there is neither a person nor a company that can avoid constant global pressure. That pressure affects everyone and every aspect of each organization. Running a business has become a true global activity, and the same has happened to the human resource management.

### **Internationalization of business**

Companies, both large and small, from all countries (both developed and developing) are already present at the global scene or they are in the process of turning global. The names of all these largest companies from wealthiest countries are well known. However, some large companies, and also small and medium sized ones both from developed and developing countries, have no need to be so popular but their presence has been increasingly revealed worldwide. Therefore, there is an inevitably imposed question: What does instigate the interest and the need for globalization? There are numerous pressures and among them are the following:

- *Increased travelling.* Namely, travelling abroad has become easier, faster and cheaper, therefore hundreds of millions of people travel worldwide every year, either for business or pleasure.
- *Faster and more comprehensive global communication.* Global communication has also become easier, faster, more diversified, and cheaper. Global television networks, music, featured movies, telecommunications, the Internet, the world wide web, and printed media spread information on how people from all over the world live, what their standard of living is, what they think about it and what they want, which also helps creating expectations for increasing the quality of life.
- *Rapid development and transfer of new technology.* New technologies have been developed throughout the world and they have become accessible everywhere due to modern transportation means, education and communication. Besides that, new technologies facilitate producing goods and providing services of the world quality and prices in the entire world.
- *Free trade.* The trade between countries and regions is constantly growing since the trade agreements (globally - through the World Trade Organization, and regionally - with the help of trade agreements like the European Union (EU), the North American

Free Trade Association (NAFTA) and the Association of South East Asian Nations (AEAN) lower tariffs and open new markets.

- *Education.* Promotion of education worldwide enables companies all over the world to produce goods and provide services of the world quality and in that way increase expectations related to those goods and services. That allows companies to produce and offer their products and services anywhere in the world by using their talent.<sup>128</sup> Global communications and travelling also facilitate the exchange of knowledge and information; therefore there is no country or a group of countries that have an advantage based on a better system of education.
- *Migrations of a large number of people.* It is not just about millions of people going to foreign countries to work (either because their employers ask them to do so for a certain time, or because they are recruited to take jobs for which there is a lack of local workers), but millions of them immigrate, both legally and illegally, to other countries looking for jobs or due to natural catastrophes or political disagreements.
- *Exchange of knowledge.* The influence of global companies is enormous since they ‘export’ their management philosophies and techniques, products and services throughout the world.
- *Pressure to costs.* Due to the local and global competition, companies are forced constantly to search for lowering their costs in order to be able to compete with local and global companies that have access to raw materials and sources at lower costs, like the land, overheads and labor.
- *Quest for new markets.* Mature markets and limited abilities for growth in developed countries force many companies to quest for markets in other countries aiming at increasing their income and the market share.
- *Culture homogenization.* The integration of cultures and values through the influence of global communications and the Internet, as well as the availability of goods and services like music, food, featured movies and clothes, have led to common demand worldwide.

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<sup>128</sup> Friedman, Prestowitz, C., *Three Billion New Capitalists*, New York: Basic Books, 2005.

- *Electronic trade.* The World Wide Web, credit cards, global transportation and logistics services have allowed both large and small companies to do business over the Internet. Namely, if a company has its web site, its business is global so that everyone – from any part of the world – with the access to that web site can get in touch with it.<sup>129</sup>

Thomas L. Friedman, senior New York Times overseas correspondent defines globalization as:

*... the implacable interweaving of markets, countries and technologies to a degree that has never been seen before – in a way that is enabling individuals, corporations and states to reach around the world farther, faster, deeper, and cheaper than ever before.*

In other words, globalization is an interaction, mutual correlation and integration of people, companies and countries and it is constantly growing. Globalization designs political, economic and social structure of the new world. There are some people who dislike the consequences of globalization. However, it is the fact that the increased connection among people, companies, countries and cultures has become actual, powerful and increasingly important. The international business continues to expand, regarding the companies that make cross-border deals, direct foreign investments, and the cost of commercial exchange among countries.

According to the United Nations estimates, there are around 70,000 transnational companies around the world (with their assets and investments in other countries), with more than 690,000 subsidiaries which annual sales, as of 2005, reached almost US\$19 trillion, and which employ over 75 million people worldwide<sup>130</sup>. As of 1990, these figures have more than doubled. The total number of direct foreign investments is rapidly growing and currently reaches at least US\$9 trillion, with approximately 65% invested in and by the developed countries. The amount of direct foreign investments and trade in and by the developing countries, especially new large markets

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<sup>129</sup> Dennis R. Briscoe, Randall S. Schuler, Lisbeth Claus, International Human Resource Management- Policies and practices for multinational enterprises, Third edition by Routledge, 2009.

<sup>130</sup> United Nations Conference on Trade and Development, World Investment Report 2005, New York: United Nations and [www.unctad.org/wir](http://www.unctad.org/wir).

like India, China, Russia, Indonesia, Mexico, South Africa and the Central and East European countries, is also growing, and by the mid of this century it will probably exceed the GDP of wealthiest nations. Although the total cost of trade in large countries like the USA, the United Kingdom, Japan, France and Germany is still rising, there are many 'small' countries, as Belgium, the Netherland, Austria, Switzerland, Denmark, Sweden, Canada and Singapore whose export rates has already reached more than 30% of their GDPs. The new economies as well, like Brazil, Russia, India, and China (known as BRIC countries) are increasing their participation in the international trade (both in export and import) at a fast pace.

Some fifty years ago, the US economy participated with 53% in the global GDP, and currently this percentage is lower than 28% of the total GDP, despite the fact that the US GDP is now by far larger as well as the global economy. Not only does the world economy is larger in absolute terms, but there is a significantly increasing number of countries that are present in that economy. There is no longer just few large countries (the United Kingdom, Germany, France, Japan, and the USA) with a significant role in the global economy. However, there is a number of countries with economies rated among the largest multinational companies in the world, and also thousands of small and medium size companies that appear in surveys used for setting ranks, but which also play an important role in the international trade.

The *Fortune* Global 500 (which ranks the largest companies in the world listed in stock exchanges, according to their incomes) includes firms from a number of countries.<sup>131</sup> The 2006 list (with reference to 2005) covered 229 cities from 32 countries. (Only three years earlier, there were only 25 countries included.) The *Business Week's* Global 1000 (that ranks the largest companies listed on stock exchanges, according to their market capitalization) cited companies from 38 countries on its 2006 list, because, for the first time, it included companies from new markets.<sup>132</sup> *Forbes'* Global 2000 (listing the largest public companies according to their sales, profits, assets and marketability) covered companies from 54 countries in its 2006 index.<sup>133</sup> The London-based *Financial Times'* Global 500 (with

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<sup>131</sup> Fortune (2006), The Fortune Global 500, July 24:91-96.

<sup>132</sup> Business Week (2004), Global 1000, July 24: www.businessweek.com

<sup>133</sup> Forbes (2006), Global 2000, April 17: www.forbes.com.

raking based on market capitalization in all large stock exchanges in the world) comprised firms from 33 countries in its list from 2006.<sup>134</sup> The *Fortune* Magazine has even made a list of 50 most powerful women in the global economy in 2006, including women from 20 different countries.<sup>135</sup>

Consequently, the international business is no longer in domain of large companies from great and/or developed countries. These surveys have shown that the substantial contribution to the global trade is currently provided by companies from small countries, developing countries and/or newly created markets like Argentina, Bermuda, Brazil, Chile, China, Columbia, the Czech Republic, Egypt, Greece, Island, India, Indonesia, Israel, Jordan, Liberia, Luxembourg, Malaysia, Mexico, Morocco, Pakistan, Panama, Philippines, Poland, Portugal, Russia, Saudi Arabia, Singapore, South Africa, South Korea, Thailand, Taiwan, Turkey, the United Arab Emirates, and Venezuela.

All these surveys focus on large companies listed on stock exchanges. The main reason for this is certainly the fact that the data on these firms are available to stock exchanges where they are quoted. However, these surveys fail to cover thousands of small and medium size companies, private and family owned ones, and those that are state owned, which mainly do not publicly announce their financial statements. It is certain that there are millions of small and medium size companies that buy and sell on the global market. Since there is no way to establish either their size or number, there is also no way to find out about their role in the global trade. But it is unquestionably significant. The issues related to human resources in their global operations are also crucial equally for them and their major competitors.

Operating in those seemingly borderless companies, and simultaneously within the limits of numerous national legislations and cultures, is the main challenge to the human resources management.

As an addition to this complex issue there are many firms that generate more than half of their income outside their home countries, and there is also a rising number of countries owned by foreign companies. Some of these major well known companies with more than 50% of their income coming outside their home countries are

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<sup>134</sup> Financial Times (2006), global 500, June 10: [www.ft.com](http://www.ft.com).

<sup>135</sup> Fortune (2006), Global power 50, October 16: 191-192.

Coca Cola, Dow Chemical, Exxon, Fuji Film, Hewlett-Packard, Honda Motors, IBM, IKEA, Intel, Manpower, McDonald's, Nestle, Nokia, Royal Dutch Shell, Siemens, Unilever, Volkswagen and Xerox.

There are more and more companies of all kinds and sizes entering licensing, acquisitions, establishing foreign subsidiaries, offshore arrangements, making deals for out-of-company services, and creating alliances with foreign partners.

The outcome of these international acquisitions and partnerships is the inability to identify the nationality of companies, products and services, and out of practical reasons it has even become irrelevant. The same applies to the nationality and location of human resources within companies. Managing these “borderless” human resources is a complex and difficult task, mainly because it is always particularly important to national identities of those who run their legal and institutional activities, and all that in an unexpected pace without precedent. The opening of new markets and the emergence of competitive foreign companies create pressure on literally every large industry in literally every country. These developments affect human resources management in numerous ways. Increased competition puts a higher pressure on companies that are to develop capacities for doing business at lower costs, faster, higher quality, better customer services and more innovations, both at home and abroad. Human resources departments are supposed to recruit, select, develop and retain the talented work force that can achieve global competitiveness, often in a large number of countries.

### **Strategic decision “to come out to the international scene”**

Multinational companies (MNCs), that want to be successful in global markets, should develop business strategies that utilize global resources and markets, including functions of their human resources. If they want effectively to contribute to that success, managers of international human resources should learn how to help global strategic management of their company. Since companies differ in their level of international development and scope of international operations, managers of international human resources should be able to provide their contribution to the development of these global operations, regardless to their size.

When management starts to develop and implement global strategic plans, then it begins to deal with issues of global human resources as well. Issues of global human resources are among most essential prerequisites for successful competing in a global market. The new global, complex and often chaotic world of multinational companies demands from human resources, as well as from other management functions, setting a new strategic focus and developing new capabilities. There are not enough studies being carried out on the measure of how much the MNCs have actually engaged their function of human resources management in its global strategic planning. The research carried out so far disclose that human resources are not much inclined to be involved as much as we hope for. It often happens that a human resources department is the last area of management affected by the internationalization, and managers in charge of human resources are among the last to be personally internationalized. However, the experience and observation indicate that this situation is rapidly changing.

Management of international human resources *implies studying and applying management activities of all human resources since they influence the process of managing human resources in companies in a global environment.*

The role of the human resources management of a multinational company is becoming more and more important since it gets more involved in finding out solutions for business problems at the global level. Therefore it is necessary to know the best way for the human resources policies to support faster progress of globalization. Challenges that human resources management faces in a MNC, since this function aspires to become a crusader of globalization, are the following:

1. *Development* of global thinking within the function of human resources, particularly the awareness and understanding of a new, global, competitive environment and its influence on managing people throughout the world. The challenge of global resources management lies in finding the way how to, in an effective manner, attract and retain thousands of employees in MNCs in many countries in order to achieve strategic goals. Moreover, it includes not only the engagement of MNC's employees in different countries, but also the role and importance of globally mobile employees, such as expatriates, repatriates, and those involved in short-term international tasks.

2. *Harmonization* of basic human resources processes with new competitive demands at the global level, simultaneously responding to local issues and requests.
3. *Increasing quality* of global competences and abilities within the human resources function.

### **Structure of global human resources**

The new model of a 21<sup>st</sup> century company is not always a MNC like the one we already know, but a globally integrated organization which is significantly different in its structure and operations, raising numerous questions related to strategic challenges and the international human resources function. These challenges include:

- Constantly growing awareness, particularly in large MNCs, of the lack of talent in the world related to human resources. There are very few opportunities provided for university education; companies are failing to get involved in internal development of international human resources talents, including the engagement of expatriates; and new structures for providing services to international human resources still are not engaged in the development of human resources, neither within companies, nor outside them.
- There are numerous questions related to relationships among employees – e.g. comparing workers in different countries, which makes the programming international human resources and providing services extremely complex and difficult.
- Globalization and free trade have induced many countries to change their legal frameworks (e.g. China has become member of the WTO, and India deregulated its economy), which affects practices of international human resources and local management of a certain country.
- There is a huge inconsistency in human resources infrastructures related to the implementation of international human resources programs in the world.
- Desires of employees in the world are constantly changing and often induces new and difficult challenges:
  - Global workforce seeks for supreme leadership from its own country, and not only from the company's main office;

- Local labor and local human resources members want the main office to respect their dynamics of a local office;
- Management of local offices and joint ventures want the expatriates to become citizens of the country they have come to work in;
- Local employees desire to have defined careers and get involved in planning corporate career. They expect the parent company to instigate developing opportunities for local employees;
- Local offices often feel as being excluded from corporate planning. They want and expect to be involved particularly in communication on future organization changes;
- Local business units expect to be visited by the leadership from the company main office, and not to be taken for granted;
- Those who are employed in branch offices abroad, worldwide, are calling more and more to be included in the variable compensation schemes and they expect to be involved in overall planning of the parent company's remuneration.

Demands of that “new world” influence human resources (and international human resources as well) more than any other area of managing organization. The transfer from administering staff to strategic human resources, from mainly local to global human resources, from traditional (paper and pen) to providing services over the electronic media (electronic human resources), and from a soft sale (do that because it makes people feeling fine) to a hard sale (measuring results of human resources programs and showing their positive effect to the company profitability and the resulting market capitalization), have caused the shift in the nature of services and competences of human resources. Certainly, the traditional transactions of human resources have not disappeared. Instead, the automated ones are outsourced and local human resources practices are now multiplied in various countries where the company operates. Consequently, the current practitioners in the area of human resources should develop a new model of thinking and computer techniques and measuring performance of human resources.

One of most important challenges to international human resources is the fact that the function of human resources, for many reasons, is not a highly globalized function. Regarding the international business, the function which is mainly localized is the human resources, and on the other hand, there are numerous forces

that instigate companies to globalize their operations, even their functions of human resources (international human resources). Like Brewster et al. say, *“Initiatives that are aimed at improving (global) time, functional or financial flexibility are introduced parallel to integral programs with the intention to connect work practices and the need for radical promotion of costs (in the entire world). By increasing their flexibility companies also want to change the nature of identifying employees and their feeling of engagement, and that altered identity does not recognize national borders.”*

In order to resist pressures, MNCs have started to follow several different models of organizing international human resources, i.e. their functions of international human resources are encountering numerous challenges:

- Consequences of redesigning global business processes, searching for a global strategy excellence and global redistribution and relocation, which often happen.
- Absorption of acquired companies, merging the existing operations on the global basis, employing staff in strategically integrative teams and efforts to develop and harmonize essential processes of human resources with these merged companies.
- Quick start of international operations and organizational development since they mature through various phases of business cycle.
- Applicable capabilities of international operations with increasingly higher needs for more skills in local operations and increasing complexity.
- The need to utilize the potential provided by technology in the accomplishment of human resources through mutual services, on global basis, with taking the social and cultural aspects into consideration when it is necessary.
- Changes in the chain of providing services of human resources because the need of having several intermediary providers of services has been decreased, and the use of webs has increased.
- Conceptualizing adequate vows regarding the level of efficiency that the human resources function can provide to its company and that the obligation to fulfill these vows is carried out in the circumstances of strict control of costs.

While dealing with these developments, international human resources should encounter the four major challenges: managing transfer from managing local human resources to managing international/global human resources, enabling the development of international human resources capabilities on global basis, providing management of effective knowledge within national borders and business units and providing effective human resources services at reasonable costs. In an effort to deal with these challenges, many global companies are currently developing their international human resources in a three-layer organizational structure. At the top of these MNCs is an organization like a main office composed of a small team of senior executives in charge of human resources, who deal with strategic organizational and human resources issues. They closely cooperate with the senior management regarding the organizational issues, provide insight into global strategy and cooperate with two groups: a team of highly specialized experts and a global team of human resources managers in charge of the country /region who act as local business partners, spread to all global operations of the multinational company. At the bottom of this international human resources organization is the traditional human resources staff who implement programs and functions on the level business units. These services could be provided internally through common service centers or externally by engaging outside experts who exclusively deal with issues related to transactions, on daily basis – and that mainly over the Internet, and not face to face.

The intermediary business partners are those who contribute the functioning of this structure, since they implement the strategy at the local level, the strategy that has been designed at the top, and they outline and supervise the transactional services at the bottom. These partners of human resources have an extremely important role. Each of these three levels demands different competences and that is where the international human resources challenges lie today and in the future.

### **Professionalization of international human resources**

A significant professionalization of human resources has occurred in the entire world. According to the survey on human resources profession in 23 countries, carried out by Claus and Collison, there is an increased convergence in education, skills and acquired knowledge

of human resources practitioners. In the sense of the accepted professionalism indicators, like the agreed level of knowledge, recognizing it as a profession, discretion and autonomy in fulfilling responsibilities, certifying and the increase of local, national and international organization of human resources, human resources have certainly won the recognition as a major profession. This research, however, discloses a need for another acceptance, both within the very profession and outside it. There are more and more practitioners in the field of human resources (and international human resources) who are to gain their professional degree in business, who should use the advantages of seminars and conferences devoted to the topic of human resources and local and national professional associations and local colleges and universities.

The international human resource management has to be recognized by executives, strategic partners and line managers, as an essential element of a global company's success. Surveys have confirmed that the focus on progressive programs of international human resource is connected to achieving global competitive advantage. Therefore the international human resources programs and departments should receive great attention and resource. Global managers should have experience related to the international human resource tasks, and international human resource managers should have experience related to the global line management.

### ***Certification of global human resource***

The US Human Resource Certification Institute (HRCI) has introduced a procedure for testing professional skills and knowledge in the area of global human resources and acquiring certificates. First certificates, Global Professional in Human Resources (GPHR), were issued in 2004. The possession of this certificate means to an employer that a person is highly competent in the field of international human resources. The level of knowledge required for global human resources has been identified through the analysis of practice and it comprises knowledge in six areas:

- Strategic management of international human resource,
- Organizational effectiveness and development of employees,
- Global employment,
- Management of international tasks,
- Global compensations and remunerations, and

- International relationships and regulations for employees

The Society for Human Resource Management (SHRM), the largest American and the world professional association of human resource professionals, has established the global SHRM system of learning for codifying the level of knowledge.

### **International human resource – job for the future**

Several years ago, the IBM sponsored a Towers Perrin's study that was supposed to identify skills necessary to international human resource in the future. These capabilities were also marked as those where the largest gap lied between the international human resource and the abilities considered as being necessary in world class organizations, in the future. These capabilities are the following:

- The capability of educating and influencing line managers regarding policies, practices and the importance of human resource,
- Computer and technology literacy, so that global data basis could be created and used for counseling and decision-making and providing transactional services of international human resources throughout the world,
- The ability to forecast internal and external changes, particularly those related to availability and qualification of human resource talents in the world,
- Demonstrating managing abilities for the function of international human resource in a corporation, at the level of main office and business units,
- Focusing on quality of human resource services in a company,
- Defining a vision on the future position of human resource and communicating this vision to the international human resource division and the organization,
- Developing substantial knowledge on numerous international human resource functions,
- Readiness to take over a particular risk in the development and implementation of innovative policies and practices of international human resource,
- Capability of demonstrating financial influence of policies and practices of international human resource.

Having in mind the need for these capabilities there comes up a question: What should the international human resources do in the future?

- ***To engage international experience*** – International human resources should convince managers at MNCS that it is important for global competitiveness to have a global work force that knows and understands the international business. In that way the company should appreciate the importance of including the international knowledge and experience, as criteria, in the process of recruiting and employing.
- ***People with international experience should be appointed (dispersed) to posts throughout the company (including the human resource as well)*** – One of ways to promote the aggregate competence of the company in the international business is to appoint (disperse) people with global knowledge and experience throughout the firm.
- ***To learn how to recruit and employ on the global basis*** – The international human resource should develop the capability to recruit talents from the entire world and to employ such people in all global operations.
- ***Increasing availability of international information to the company*** - The international human resource should have an active role in providing information to all company locations (e.g. international magazines and newspapers) , and not only on company's global operations, but on global business in general, including activities of governments and competitors in countries they do business.
- ***Everybody should be trained for communication, behavior, protocol, and negotiating styles in other cultures*** – this is an additional but specific aspect of providing information to work force on global business. These areas substantially increase the competences of the company in running its international business.
- ***Securing international development tasks*** – the international human resource should secure that the global company understands and supports the required system which considers the international tasks as the main component in all programs of executive development.

- ***GPHR (Global Professional in Human Resources), certification*** – Practitioners in the area of human resource that want to work in the global arena should have the basic global knowledge on human resources.
- ***And the most important***, international resource managers should understand and respect the importance of their own development in order to perform better in their global terms of office. That includes complete understanding of the way in which the company earns globally, capabilities of articulating the standpoint that uses the language of business in all global strategic discussions, defining and using balanced measures for assessing global human resource efficiency aimed at measuring the total contribution of the international human resource to the global success of the company, and all that with an aim to constant improvement and finding better solutions for unstable global challenges.

When these challenges are overcome and managers of international human resources further develop their global competences, multinational companies will develop world capabilities of international human resources with the following characteristics:

- Quick reaction to a highly competitive market and global business structure.
- Immediate connection to strategic plans of global business.
- Joint definitions by line managers and international human resource managers, as equal partners.
- Focusing on global quality, customer service, productivity, engaging employees, team work and labor flexibility in all operations of the company in the world.

Only when an integrative and accepted human resource management has been developed, the fast-reacting one, the management of international human resources will reach its potential and take its rightful place in the management of current successful, global companies.

## **Conclusion**

Although there are some people who dislike the consequences of globalization, the fact that there is a higher correlation among people, companies, countries and cultures is actual, powerful and becomes more significant. The very idea of globalization is a positive tendency towards achieving accessibility, as well as to uniting all resources in the planet, aimed at attaining a new developmental effect, and based on that the increase of wealth and wellbeing of men. However, the process of globalization or internationalization has been started by countries with various and often differentiated positions. On the other hand, nobody and no business can escape the constant global pressure. That pressure affects everyone and all aspects of each organization. Running a business has become a real global activity, and the same happened with human resource management.

In the situation of internationalization and globalization of the environment, human resource management is facing numerous challenges, and the essential issue is whether the science and practice of human resource management will be an instrument of achieving negative tendencies of egoistic globalization or the advantages of globalization will be used for the development of managerial and ethic principles that will lead the globalization of all resources towards the increase of general and individual wellbeing?<sup>136</sup>

The issues related to human resources are among the most crucial for successful competing in the global market. The new global, complex and often chaotic world of multinational companies demands from human resources a new strategic focus and new capabilities as it demands from other management functions. Human resource management finds overcoming global challenges a very complex process, since they are not just a consequence of huge distances, but of cultural, political and economic differences among countries and their populations.

In any case, a modern human resource management is supposed to strengthen the partnership relationship, trust and cooperation, and the growing importance of knowledge is the human resource as an essential and special resource of new age.

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<sup>136</sup> Djurovic, M., *Development of Human Resource Management in Serbia – Indicators*, Telekom Serbia a.d., Belgrade, 2010, pp. 327.

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Branko Djedovic was born on June 6, 1958. He graduated from the Military Technical Academy, Zagreb, Croatia, and won a master degree at the Faculty of Mechanical Engineering, Nis, Serbia. He holds a PhD degree with honors from Belgrade University Faculty of Mechanical Engineering. He was educated and scientifically trained in the following areas: Managing Systems, Work Organization, Modeling Systems, Managing Projects and Quality Management. He was engaged in the work related to the areas of development and maintenance of complex technical devices, higher education, studying and applying management in large public sectors in practice. He served as Deputy Head and later as Head of the Army Administration, then as Deputy Minister Assistant Adviser, and as Assistant to Minister of the Material Resources at the Ministry of Defense.

Dr. Djedovic has been teaching for more than 20 years, and has thought at five universities (at three faculties and two colleges). He is the author of the textbooks: *Quantitative Methods in Management* and *Leading and Evaluating Projects*. Djedovic's articles, both individual and as a co-author, have been published in the international and national scientific and professional journals, and he participated in the international scientific symposiums with 30 science and professional papers presented. His articles have been quoted in the SCI list, and the United Association of Serbia for Quality and Standards (UASQS) awarded him a Certificate for excellent paper and the best presentation on the seminar at the 11th International CIRP Life Cycle Engineering Seminar, and also at the 7th International Convention on Quality for the promotion of the national quality movement. Professor Djedovic teaches the following courses: Fundamentals of Technology Processes Designing at the undergraduate studies, and Strategic Management and Innovative Management at the postgraduate master studies at the European University Faculty of International Engineering Management.

## **DEVELOPMENT OF ENGINEERING MANAGEMENT STRATEGY IN GENERATING COMPETITIVENESS IN INDUSTRY**

**Summary:** *Development and progress of Engineering Management theory and practice are supported by society that is helping them to interpret the technology advancement, new processes and phenomena. Each society creates its vision by interpreting the reality on the basis of society and individual needs, and capabilities of the community. The processes resulting from changes are characterized, above all, by their global character, new technologies and new economies which directly determine all segments of life of each individual. Engineering Management has major influence on the new business philosophy. Creative work and sociably beneficial work are universal tasks, as well as strategy, vision and mission of contemporary Engineering Management.*

**Key words:** *Engineering Management, Strategy, Society, Changes, New Technologies.*

### **INTRODUCTION**

Modern European society, with special reference to Central and South East Europe, is bringing new forms of manifesting its paradigms on daily basis in the complex process of progression and changes. Therefore, according to the action-reaction principle, it induces new inventive energy of business and educational potential which directs changes and gives them shape. High education system supports modern business processes and leads the human resources into the widest, systematic and legal activity of creating capability and adopting knowledge of its members, aimed at responding to challenges and necessities.

Management holds a responsible role in the given process. Management is defined as a process of creating and maintaining conditions where individuals, working together, efficiently achieve their stated goals. [1].

Technical advancement in the society changes its creative dimensions and expands the range, and it demands from the high education system to follow it, to educate its members in production

and service industry and in that way makes them useful and socially responsible. It is quite justified to argue that the technology is the framework of economic development, but numerous issues regarding the nature, shape and intensity of dependence have remained open and insufficiently explained [3].

Only the Engineering Management can explain and confirm, within the education system and in the labor market, the modern social changes which are permeated with advancements in technology, and also new management strategies within them. Engineering Management philosophy and policy, the structure of its functions, and the algorithm of the process, are at the very top of the management hierarchy pyramid according to the significance of the study, possibility of taking action, and scientific synergy in the quadrangle: society-economy-technology-management. New economies and new technologies are currently on the stage.

### **1. CENTRAL AND SOUTH EAST EUROPE REGION SOCIETY AND ENGINEERING MANAGEMENT**

The route of the Central and South East Europe society is marked out by current achievements of socially engaged and socially responsible individuals, and also some formal and informal groups. All of them together give it the force of progress, policy and philosophy of development, cultural contents, the shape and the form of dynamics of movement. Its movement is stable and sustainable as far as the potential knowledge can manage and evaluate it by valid criteria, comparing the desired and achieved state. Changes are complex, thorough, radical, dynamic and compound. The processes are deeply intensive in the area of cultural dimensions, then in the social activities, production, services and human needs and practices. All of them are implicated in technological development and resulting in socially beneficial activities. Accepting them is partially favorable and partially opportunistic. It is a fact that younger generations, the generations of high education system members, demonstrate satisfactory level of tolerance and adaptability to changes of social processes. It is in its own interest of high education to use this fact to the common benefit of the society. Engineering Management is granted the privilege to interpret inventive change in the context of focused technical-technological progress, and in terms of economy and business.

How to interpret and implement it into all forms of human creative work? The results of social creative work by all means currently have a new content and quality. They can be participated, understood properly, accepted and led only by highly educated individuals and teams, educated with the goal to establish new production relations by their knowledge and capabilities. Their task in the customer-centered economy is to educate the producer and the customer so that the customer could recognize the goods and services as useful and therefore to know how to use them. Scientifically viewed, this role can be played only by the Engineering Management, led by competent, inventive, creative and above all highly educated managers who know and recognize the processes and phenomena as engineering, interpret them technically and apply easily, all that in the interest and benefit to the society. The society of the Central and South East European region has favorable opportunities for adopting knowledge, accepting and developing new technologies, which a solid basis for the development of Engineering Management and its strategies.

## **2. ENGINEERING MANAGEMENT IN THE MAZE OF TECHNOLOGICAL PROGRESS**

The character of technological changes, as a primary challenge to the company management, reflects in a high degree of ambiguity and uncertainty in social relations, cultural values, economy systems and policy, ecological demands, and all that in the interest of desirable response by the customer and of goods and services with market reputation. The new company philosophy is implied by the wish and desire to put all processes under the control and focus them into desirable direction. The established philosophy and substantially developed business management is a concept and practice defined as Engineering Management.

Engineering Management represents a response and effort to provide and carry out radical changes with a high level of technical-technological processes integration, and even more compound requests and needs of individuals, shaded with technical achievements. Its power comes both directly and indirectly from each individual and more or less it gives them tools for generating new benefits and socially justified values. Highly educated individuals and groups, educated in the area of engineering management, are qualified

to give directions to the social reforms and set prior tendencies. They manage the future and evaluate its educational and auspiciously determined activities in the context of synergy of business and technologies.

Digitalization and virtualization of our reality have induced quite new way of functioning for social communities and established completely new value system. Individuals as members of these communities without that knowledge would not be able to accomplish themselves. Interpreting this area of human activities and its influence on business is possible only in the sphere of scientific achievements, theory and practice of Engineering Management.

Cause and effect relationship between Engineering Management new technologies, and social categories it participate in, can be conceptually outlined in the Figure 1. The system of cultural values of a society, its economic potential, the technical and technological achievement, and political tendencies, marks out a scope and intensity of technological modernization. It marks out the engineering management as well, in the context society capabilities to create new socially beneficial values and verify them in practice.

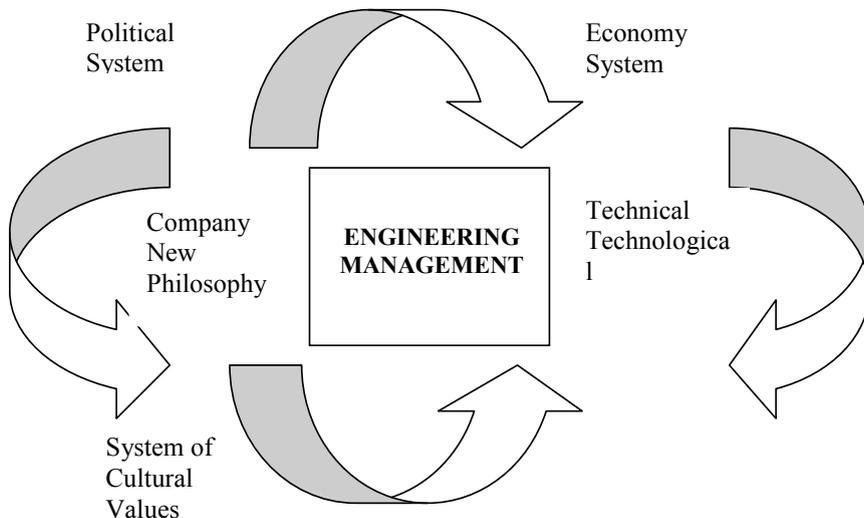


Figure1. - Relationship between Engineering Management, New Technologies and Social Categories.

### **3. ENGINEERING MANAGEMENT AND SOCIETY CREATION**

Technological progress, if properly led and directed, has reached its primary significance in achieving strategic goals of a society. The society is looking for an answer to the question: *How to direct the new opportunities and how to manage new demands in the best interest of all, how to motivate individuals and groups to contribute the technological progress and social advancement in general by gaining higher education and creation.* Being in the center of economic and business activities, the technological progress enables, and Engineering Management explains, how to build and maintain the competence and competitiveness of creation which is in the best interest of both of the society and the individual.

The essential competences are actually a combination of capacities created on the basis of market, social, ecological and other demands.

According to the problem it deals with and the subject it examines, the methods it uses, the goals it focuses on and the scientific hypothesis, Engineering Management is established on the synergy of factors of organization, performance and innovativeness. Innovativeness in the way of thinking and acting generates a new product, a new service, a new technology, a new benefit to the society. All that in the chain of values is united by the concept called Engineering Management. Engineering Management analytically studies the altered role of technology in modern times. The altered role of technology in modern times has substantially contributed to the new comprehension of the role and importance of the research, creativeness and development in creating and pursuing the policy and strategy of the society development [4].

The innovation factors must be viewed in an all sided and cause and effect context through the practice and theory of Engineering Management, and through the process of higher education they should be scientifically determined. The achievements must be used to exercise the entrepreneurial impact on the environment. The user of the high education system should realize that the creative comparative advantage lies in the concept of Engineering Management, technological knowledge and skills, and its entrepreneurial implementation.

The key points that determine Engineering Management and depict the benefits of this theory and practice in business and managing processes, are reflected in the following characteristics:

- scientifically based and methodologically supported as a separate scientific discipline,
- subject, problem and goal of the study is focused by technical-technological progress,
- application of modern qualitative methods of analysis,
- application of the wide range of quantitative techniques of scientific research and forecasts,
- decision-making possibility based on model and modeling,
- software support in resolving compound multidisciplinary business problems,
- contingency approach in special cases of business activities,
- strong support to the project concept of doing business,
- technical supremacy in relation to other management areas,
- flexible way of organizing business activities,
- business goals defined by criteria,
- given technical explanations for limits in doing business,
- optimally defined set of alternatives – strategy of acting,
- multi-criteria approach to decision-making,
- strong synergy effect of the theory and practice confirmed in numerous case studies,
- innovative approach to initializing ideas,
- creativity in conducting processes,
- network planning and mathematical programming in analyzing structure and analyzing time frame of business activities,
- management by goals.

The hierarchy of advantages and benefits of Engineering Management in the chain of values in the new business philosophy can be shown as illustrated in the Figure 2.

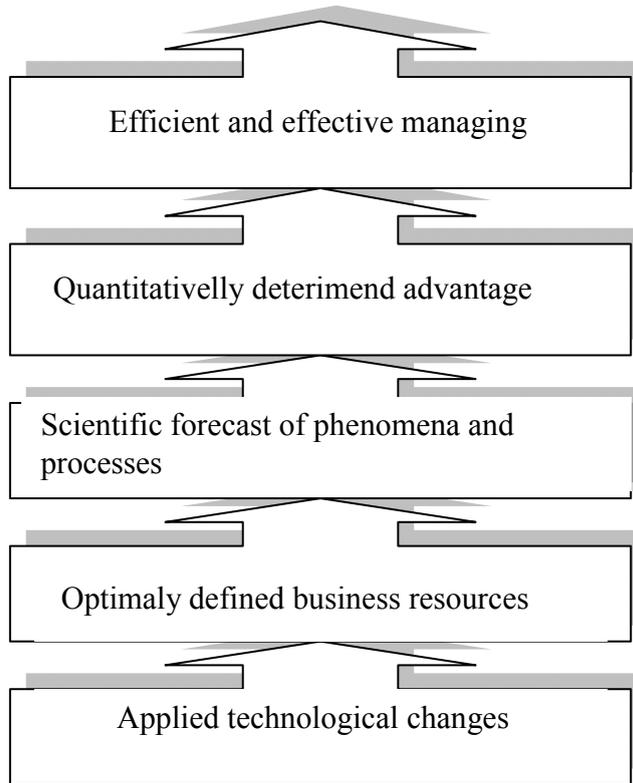


Figure2 - Engineering Management hierarchy of advantages and values

Engineering Management as a new scientific concept incorporates the knowledge of engineering and management disciplines, which creates a powerful synergy of benefits. It integrates new technology into the structure of the new organization, which is a key attribute of the strategic advantages of the present and future business systems. This has laid the foundation for new business opportunities and the foundation of potential success. This claim arises from the scope of education based on technical-technological and engineering approach, and also on the best established correspondence with the needs of society and the laws of economics and business system installed within it. Engineering Management offers companies the best way of understanding the internal and external environment in the context of a complex systematic and

scientific response to predicting capabilities, needs and the scope of the company's future development. Mathematical precision and synthesis of the process and logic of the natural science claims that are a part of the algorithm of educating engineering managers are completely relevant scientific milieu which will justify the present and the future knowledge of managers. Their claims, axioms and hypothesis will be used to solve numerous examples of complex practices which outcomes will be treated as managerial challenges of the new age, as a confirmation of new scientific achievements in management and new ways of satisfying consumers, resulting from new needs and dynamic desires of those who use these products and services. Among all those currently present opinions regarding management, Engineering Management is the best in eliminating dilemma of scientific value, purpose, goals, application, benefits, effectiveness, and efficiency, always with the power of the quantitative criterion confirmation.

The new quality of Engineering Management achievements, which prefer advantages of engineering management to other management areas, is related to the ability to recognize, single out and apply the engineering way of thinking, the engineering behavior principles, and engineering skills of affecting processes and resources. The ability to manage technical production processes and services along with the administrative ones provides it with complete quality based on adequate application of the existing and the future correctly envisaged technologies.

The time before us depicts the business problems like multidisciplinary processes for which solution it will be necessary to apply multidisciplinary, expert knowledge based on what the engineering management is actually being developed. Instead of inciting conflict and slowing down the company's development, the technology and changes offer solutions with new possibilities, inspiration and challenging achievements. The effort and everyday struggle of managing engineers is properly understood and accepted by the company management, employees and customers, since all of them as interested parties consider that as their benefit and opportunity. That is exactly what it is.

It is the task of Engineering Management to implement org-ware, hardware, software and brain-ware of a company into the function of its effective and efficient business activities, with

distinguishable comparative advantages as its main route. The key processes within the company are also being led in that manner, since the organization of knowledge has been aimed at achieving strategy goals. Management engineers use the technology as an instrument of control and dominance to meet human needs.

Technology transfer, both in vertical and horizontal direction, in the light of new needs, achievements and possibilities, can be carried out competently, from the aspect of design, application and use, in the easiest and fastest way by management engineers. In the context of states needs, the knowledge related to Engineering Management in a growing company is the best example of needs, and achievements of the capital of knowledge which creates a new system of values in the company and new way of evaluating it, focused on fair values.

The stated point offers an optimal company's product and technology positioning aided with the market and technology matrix. In that way the goals of technology effectiveness and efficiency, and uncertainty and indecisiveness of the future, have been reduced to the lowest level of business risk.

Besides all stated points, the advantage of the engineering knowledge related to management, the engineering management does not disqualify all other management knowledge. The best way to incorporate into the new philosophy of managing business is by networking the methods and techniques of both in the search for the best alternative for a good product and service.

#### **4. STRATEGIC TERMS OF ENGINEERING MANAGEMENT**

The concept and the idea of a strategy are key elements of the philosophy of managing business processes. In order to gain more complete understanding of the purpose and goal of Engineering Management strategic terms, it is necessary to remind of definitions of universal strategy according to which:

- Strategy is a wide program of defining and achieving goals of the organization and carrying out its tasks, and a model of organization interacting with its environment over the time (Zecevic) [1];

- Strategy refers to determining basic long-term goals and tasks of the organization, and so taking the courses of action and allocating resources required for achieving these goals (Chandler) [5];
- Strategy is the thing that determines the framework of organization's business activities and provides guidelines for coordinating these activities so the organization can master them and affect the changing environment. Strategy articulates the environment preferred by the business organization and the type of organization it tends to (Hiroyuki) [5].

The essential and recognizable outcome of one strategy is the content of most important decisions made by an organization and the fact that strategic decisions shape the competitive ability of the organization.

By following the idea and previously stated strategy determination, the strategic terms of Engineering Management of a business system define the key directions of scientific development of the area of Engineering Management related to strategic goals of the organization, on the basis of preferred Engineering Management approach leveraged with other functional areas of management.

Strategy of Engineering Management is the process which the business organization, oriented to the engineering management concept, implements in order to design its product and services according to high engineering standards. In that way the quality and user friendliness which exceed those of the competition are offered to customers. In that context the engineering management strategy contains the algorithm of action activities according to the following:

- studying, analyzing and accepting strategic goals of the organization which gives the answer to the question what the organization wants and tends to achieve;
- responsible implementation of adequate technologies into the processes related to products and services;
- defining processes, activities and resources from the engineering management content that will recognize opportunities, avoid threats and gain the aimed competitive advantage.

Strategic view of Engineering Management as a scientific discipline, concept and practice focuses by double criteria: *the first*, according to comprehensive meaning of modern technologies permanent development; the *second*, according to pragmatic needs related to everyday life and work, customers and their customs.

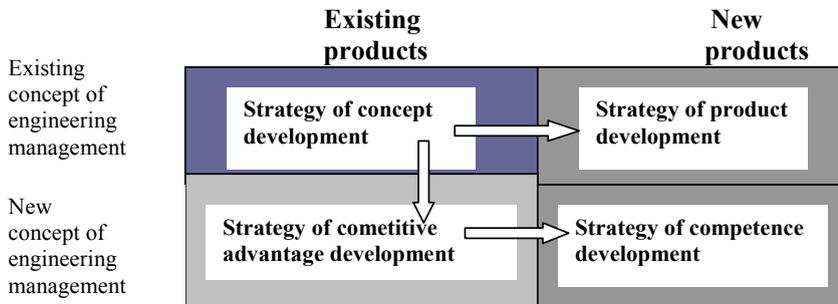
Integrating these criteria into the content of management offers new quality which can be recognized within Engineering Management. Led by these terms the engineering management while developing combines the following alternatives: working out new, original strategies resulting from what the new strategies could offer; accepting and adapting to the existing personal experiences and to the experiences of others. The strategy of Engineering Management development can be considered both in the field of science and in practice.

As a science, Engineering Management is strategically streamlined by scientific achievements in technical-technological areas and by the dynamics of their application and use in business systems. It is led by the term of competence to comprehend the science, to apply and use it in the development of products, services and society as customers-buyers.

The choice of optimal Engineering Management development strategy in a business system is determined by a group of external and internal factors of the business system. These factors can be further classified into three groups: - eliminating, - functional, - descriptive. The criteria of choosing and optimal strategy are defined in the following:

- the analysis of the favorable opportunities, i.e. the threats in the environment;
- the existing strength of the business system from the technical-technological aspects and weaknesses of the competition;
- recognizing the strengths of the competition in the technical-technological area;
- neutralizing internal weaknesses by applying innovative processes of Engineering Management;
- mutual influence of strategy, mission and vision of development of the business system on one side and Engineering Management on the other;
- the comprehensive analysis of all available resources of the business system;
- technical and technological achievements in science and practice;
- recognizing the benefits of new technologies;
- competences of Management to prefer, apply and use the engineering in business.

Influenced by the stated criteria, new suppositions have been created for developing most favorable strategies. Their relationship might be interpreted in the following graph, Figure 3.



Strategies of Engineering Management growth and development.

The chosen strategy is viewed from the aspect of organizational elements that are composed of: 1) managers and other employees; 2) organization structure; 3) organization culture; and 4) organization systems. After completing a thorough analysis an activity plan is being worked out for introducing the development strategy of Engineering Management, and processes and periodic evaluations and the control of the plan are envisaged. All stated actors are essential for adopting the new strategy. The business system will focus on those factors which are considered as essential for the development of the strategy in the future.

## **5. ENGINEERING MANAGEMENT IN GENERATING COMPETITIVE ADVANTAGES**

All efforts made while building the competitive edge are also essential for building competitive resource forces and capabilities. They include: strategy of carrying out research and technology development and engineering; strategy of managing the chain of supply; strategy of production; sales strategy; human resources strategy; and the strategy of funding [6].

Engineering Management supports permanent innovation of products as a result of the team work aided with knowledge gained by the market research, research and development of new products, designing and engineering. The expertise is the concept of this process and it essentially implies to a set of; - expertise in performing the given activity; - thorough expertise; - recognizable expertise. This

leads to the conclusion that not all competitive abilities are equal, since different expertise provides different competitive capabilities. It is desirable in a business system to prefer the strongest – superior expertise on the basis of which the new values are to be built and the level of usable resources increased. This observation leads us to the conclusion that business systems that lack the necessary competitive values can potentially win a victory on the market.

Toshiba computers, which are neither faster nor equipped with larger memory than the competition, could be regarded as good example of successful differential approach to competitive values. Nevertheless, Toshiba has become the market leader by combining good resource forces and strategic partnership with suppliers of components which refers to the following: efficient assembling, expert design, wide range of various models, and attractive mixture of installed performances in each model [6].

In the context of comprehensive and fast technology changes, strategies of Engineering Management related to competitive advantages in the industry are awarded with new contents and tasks:

- strengthening the ability of quicker selection and faster adoption of all necessary information;
- incorporating new knowledge in a creative manner and generating new values in that will represent the factors of success of the business system;
- faster and more thorough way of recognizing the needs and benefits for an individual, user and the society, and when meeting the new needs, and then new forms of services and entrepreneurial activities should be created for all;
- learning to deal with all entrepreneurial processes in a creative way, faster, better and meeting high quality standards;
- educating employees to take a creative approach to each task, and by applying the acquired knowledge permanently to promote operations and processes which they participate in;
- establishing such relationship among employees so that they put the social benefit before their personal interests and therefore
  - to see and measure their success as a successful contribution to the society and the community.

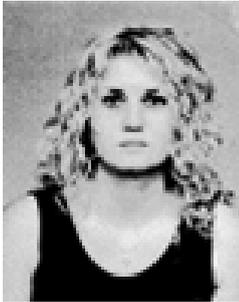
Engineering Management can carry out all stated tasks through its strategies focused on gaining competitive advantage in the business system.

## **6. CONCLUSION**

Engineering Management, besides its major commitment to create competitive advantage for products or services of the business system, is also responsible for taking a significant role in the education process and educating managerial staff in the society it is a part of. Technical development in the society, changes its creative dimensions and moves the boundaries of achievements, but it demands from Engineering Management to understand it, follow its course and apply it to the benefit of the society. The new age is a multidisciplinary category which demonstrates changes and its new forms in all segments of the sphere of society. When discussing about the complex issue related to the relationship between Engineering Management, new technologies and competitive advantages of the company, it is necessary to take into account prioritizing the needs and related demands and expectations of customers. Engineering Management, as a scientific concept, requires society support, and the society, on its side, requires usefully created expert and scientific high education institutions which will, in the age of knowledge about the present and the future, interpret and usefully apply its manifestations.

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**PROF. DR. MAJA DJUROVIC-PETROVIC**

Maja Djurovic graduated in 1987 with grade average over nine and defended her doctoral dissertation *Connection between structure and absorption-thermal features of fibrous material* in 1998 at The Faculty of Mechanical Engineering, Department for Thermal-Energy.

She has been dealing with scientific work since her studies, when she received the international citation reference in 1985.

Ms Djurovic has over 17 years of experience in higher education teaching, starting as a professor at High technical-technological school, then she worked as an associate professor, and finally as a full-time professor at the European University.

Parallel to her teaching activities, she acquired science titles (2003) as a science associate and a senior science associate (2007). She published 10 articles listed at SCI list in the last five years, and she has been quoted internationally.

She has eight-year experience working as a civil servant, taking the post of energy advisor with the Ministry of Science and Technology Development – the Department for Technological Development, Innovation Activity and Technology Transfer. At the time, she was a national coordinator for energy efficiency, the expert council member for reviewing and evaluating the study *Techno-economic Analysis of Wind Energy Use for Electrical Energy Production* for the PE Electric Power Industry of Serbia.

At the moment, she is a full-time professor at the European University, Faculty of International Engineering Management.

She chairs the Renewable Energy Sources Board, which is a part of the Serbia Society of Energy Experts, and she is a general secretary of The Society of Thermal Engineers of Serbia. Also, she is a member of the working group for Energy Safety, which is a part of the OSCE, and a member of the Energy Society Board of the Serbian Chamber of Commerce.

Professor Djurovic tutors the development of the doctoral thesis titled *A Comparative Performance Analysis of Belgrade Housing Stock: Determinants of the Carbon Reduction Strategy* at UCL – the Faculty of the Built Environment in London.

She has been actively involved in strategic and integral interdisciplinary projects in Serbia since 1994. She published more than 70 scientific papers in Serbia and abroad. In the recent five years she authored a new technology solution, four new technologies and two prototypes. Currently, she is involved in two interdisciplinary integral scientific projects.

**PUBLIC MANAGEMENT INFLUENCE ON THE  
STATE OF INNOVATION SECTOR IN SERBIA AND  
SOUTH EAST EUROPE**

**Abstract**

*This paper provides a short overview of Public Management influence on the state of innovation sector, as well as on the economy development in Serbia, with special reference to the activities after 2000, when certain changes in scientific and technological development policy have been made and the improvements in development and competitiveness of national economics as well. Despite unreliable indicators of the situation in the innovation sector and the official statistics development, presented data enable comparison with other countries of South East and Central Europe, and the rest of world, and they show the role of Public Management in the above sector with implications to the development of economic competitiveness. The paper identifies and defines parameters which provide the best description of the real situation and the effects of previous investments and activities conducted by Public Management, as well as guidelines on further activities to increase the competitiveness of domestic economy, because the investment in science and technology is the only way to establish a sustainable economy.*

*Key words: Management, Public Management, Innovation, Science, Competitiveness, Economy.*

## **1. INTRODUCTION**

After democratic changes occurred, it was necessary for the new democratic government quickly to solve existing problems, so that Serbian economy could set its geo-strategical position in relation to other countries in Central and East Europe, which have made substantial progress in their reforms towards market economy.

It is evident that science must be connected with the economy, especially regarding products, processes and services that will provide export income with a higher added value and employ talents in enterprises. The only sustainable position of Serbia is the one that involves participation in industries with a high level of added value, i.e. knowledge, since Serbia does not play a significant role in any scientific discipline in Europe and worldwide. It is undeniable that the individual talent cannot compensate for the fact that none of our universities is put on the Shanghai list of 500 best in the world. None of our institutes could qualify for the leading EU Centre of Excellence. Globalization has led to the multiplication of centers of technology and science. With the recovery of Russia, countries such as India, China and even the Middle East countries have appeared on the market in the last twenty years, along with traditionally present countries of West Europe, the United States, Japan and Canada. All of them invest significantly in science [1].

The global economic crisis has questioned the further development not only of Serbia but the majority of other countries, especially those of South East Europe, that do not have access to the EU funds, so it is quite certain that it will slow down the GDP growth, which in a sense, points to the restrictive policy of public spending in these countries, but also to the need to strengthen the support provided for scientific research in order to ensure future development.

Until 2000, a little had been done in this area in terms of legislation and in any other related activities as well, so it was an uneasy task to make up more than a decade of what was missed. Along with initiating the procedures for creating a legal framework, the significant actions have been started to promote and emphasize the importance of this activity for growth and development of the economy and thus the general society of Serbia.

Activities that had been carried out in the period after 2000 and until the Law on Innovation Projects was passed, were related to

the development of innovation, and for their most part referred to the development of adequate legal framework that would regulate this matter in accordance with international standards and practices.

Being a country located in South East Europe, the economy of Serbia failed to reach the development level it had late in 1980s, both in terms of the achieved GDP level, which currently is about 62%, and in terms of the structure and the industry share in generating it, where the share of medium and medium-low technologies shows a declining trend. Since it is a small country, Serbia used to have relatively moderately developed scientific and research potential until early 1990s... along with very low scientific production, the autonomous and indigenous development of R & D systems, low and delayed commercialization of research results, the inconsistency of measures and instruments of public support to a successful R & D, which is still in general followed by a technological lagging, not only in the so-called medium and low technologies, but also in traditional sectors of economy [2].

The export of Serbia has been characterized by unfavorable structure of sectors. This structure is dominated by products of lower product phase of completion, mainly raw materials, and semi-finished products. Intermediate products make more than 50% of total export, and if we add to it the export of energy and other goods (mainly agricultural products), it can be claimed that the sector structure of Serbian export is unfavorable. The unfavorable export structure poses a risk to the achievement of future export trends due to the potential deterioration of the exchange proportions.

The cause of unfavorable export structure is primarily due to the poor sectorial structure of the manufacturing industry, dominated by sectors with lower added value (intermediate products which make around 70% of manufacturing industry). Therefore, along with the changes in the export structure, it is necessary to raise the export potential of manufacturing industry and to increase product finalization.

However, allocations for the science and technology have not been significantly improved, and remained at about 0.3% of Gross Domestic Product. There have been no larger investments into the infrastructure. A significant number of young scientists and highly qualified engineers are continually leaving the country. Students are less interested in natural sciences and mathematics. The economy fails

to invest significantly into the technology. It is quite evident when observing what Serbia is launching on the world market. When analyzing export trends, there is hardly any difference between the contemporary and medieval Serbia.

Investing in science and technology is the only way to create a sustainable economy, because medium and highly developed countries invest more than 1% of their GDP in science and technology. There is a large number of papers, both theoretical and empirical, demonstrating the key role of Scientific Research (SR) and Research and Development (R & D) and the innovation activities in general, depicting them as a cause of employment and competitiveness growth, and the results gained from Scientific Research, Research and Development, and innovations create a foundation for the economy and society development.

The marginal value that has to be achieved, and that provides a faster support to SR, RD and innovative activities in the state, is 1% of GDP.

Only a small number of the EU countries-15 fails to reach the limit of 1% of costs for SR and R & D in GDP, and among 12 EU countries which joined the EU in 2003, just Romania, Bulgaria, and Malta failed to reach 0.5% by 2005. On average, the EU countries spent 1.84% of GDP for SR and RD activities, i.e. about €412 per capita of the EU, which reached almost € 22.400 per capita in 2005.

Croatia stands out from the SE Europe countries with 1.22% of GDP. Serbia with 0.3% and Macedonia with 0.24% are even far from the half of 1% limit.

Although the reports by the state authorities in charge of Science and Technology Development, that were being submitted to the Government of the Republic of Serbia (between 1991 and 2000), indicated that the policy of scientific technological development was successfully accomplished, the data showed that the situation in Serbia science in 2001 was chaotic, that the projected revenues for scientific research declined, the level of investment decreased, the staff turnover was becoming more frequent [3].

The negative trends of reducing scientific research potential in Serbia were mitigated early in 2001, and already in 2003, there has been a trend of growth until now, which was certainly the result of reforms made by the Public Management in this area. Institutional reforms in science, research and development were carried out in

Serbia between 2001 and 2008, in order to make the research system more efficient and more economical [4].

The results of the achieved reforms are demonstrated in significantly increased number of scientific papers compared to 1990s, but not in the competitiveness of national economy when compared to the neighborhood, which indicates a lack of focus of research programs aimed at solving economic problems and the competitiveness of national economy, although the ministries in charge have particularly insisted on them.

## **2. POSITION OF INNOVATION SECTOR IN SERBIA IN RELATION TO NEIGHBOURS**

Theory and practice of the most developed countries, not only of those as big as the USA and Japan, but also of the smaller ones, such as Finland, Slovenia and others, show that one of the prerequisites for the accelerated development of economy and society is an adequate financial support to science, research and development (SRD). The data also show that a high level of investment in the SRD has resulted in high scientific production, patent activity, accelerated technological development, and finally a high standard of living.

The OECD available data for 2005 indicate that most developed and the fastest growing countries allocated between 2 and 3.7% of GDP, out of which between 0.6 and 1.0% from the public resources, or €180 to €350 per capita per year. The fifteen EU countries (which are lagging behind the USA and Japan), invested over 1.5% and 2.0% of their GDP in R & D before the latest EU enlargement in 2004, and had an annual scientific production of more than 700 scientific papers, and 126 euro patents per million inhabitants, while the exports of high technology products amounted to 19.7% of total exports.

The new EU member states (Slovenia, the Czech Republic, Hungary and Estonia) allocated between 0.4% and 0.8% of GDP, so the R & D costs amounted to between €40 and €150 per capita and the actual scientific publications between 1,334 (in Slovenia) and 661 (in Estonia), and more than 28 patents per million inhabitants per year. Slovenia certainly leads in terms of most R & D parameters. The investment level has increased to 1.57% of the GDP which is equal to €188 per capita, so the scientific and technological output of more than 1,334 scientific publications and 35 euro patents per million

inhabitants is quite understandable. The second group of new EU member countries: Poland, Slovakia, Lithuania, Cyprus and Latvia, have allocated between €30 and €50 per capita for research and development and achieved the result of 383 to 429 scientific publications being published, but the number of their euro patents is symbolic. Countries that joined the EU on January 1, 2006 (Romania and Bulgaria) allocated less than €20 per capita, and invested between 0.45% and 0.60% of their GDP. According to the latest figures, total investments in research at the EU level make up 1.96% of GDP, compared to the USA that allocate 2.59%, Japan 3.12% and South Korea 2.91%, it presents considerable lagging behind. Statistical data also show that there are 5.3 researchers in Europe per 1,000 of the labor, compared to 9 in the USA and 9.7 in Japan, because it is estimated that the number of scientists and researchers in Europe is significantly lower than in the USA and Japan.

The level of investment in science, research and development in Serbia in 1990's was about 1.0% (GDP), in nominal value it was between \$40 and \$60 million, of which about 50% came from the budget and the remaining 50 % from the revenues of business enterprises, including the revenues from the sale of patents and licenses, foreign and other resources. The level of investment in R & D in the period between 2000 and 2007, ranking from 0.30% to 0.60% of GDP, indicates a lag in comparison to the most EU member states, some of them former Yugoslav republics (Slovenia and Croatia), but even more in comparison to Macedonia, Montenegro, Bosnia and Herzegovina. [5].

During the past five years, the GDP growth rate in Serbia was about 5.6%. If this rate continues by 2012, we will be a country with about \$6,000 per capita, which is less than it currently is in Croatia, Hungary, and the Czech Republic.

That is why Serbia needs a growth rate between 8% and 10%. That is the only way to anticipate \$14,000 per capita by 2020, and it takes about \$4 billion of foreign direct investments per year [1].

### 3. PUBLIC MANAGEMENT ACTIVITIES IN INNOVATION SECTOR AFTER 2000

After escaping the difficult period of 1990s, the budgetary allocations for science in Serbia significantly increased in gross amount, from modest €27 million in 2001, to €100 million in 2008, as shown in Figure 1.

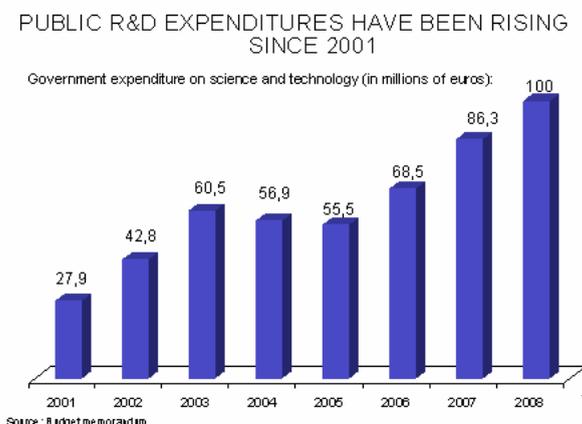


Figure 1. Investments in SRD from 2001 to 2008

Table 1 provides an overview of investments in science, research and development from public resources over the past eight years, noting that these investments amounted to between \$40 million and \$60 million in the 1990s, and that the level of investment amounted to about 1% of GDP, which indicates that the financial support to the SRD in Serbia increased several times.

Table1 The SRD costs from the public resources

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009
Billions of dinars	1.142	1.853	3.132	3.545	4.643	6.258	8.314	9.051	8.233
Millions of euros	19.12	30.13	45.85	44.94	56.0	74.9	101.40	105.04	

Source: Law on Budget of the Republic of Serbia, author's treatment

Despite given scope of SRD investments, Serbia is at the very end compared to many countries, as can be seen in Table 2.

The network of scientific, research and innovation organizations has changed after 2005, by the enforcement of the adopted laws, which among other things, provided for the evaluation of competence of scientific research organizations to conduct scientific research, as well as the accreditation from the Ministry of Science and Technology Development. In that way most research and development units in the former large companies ceased to exist during the ownership transformation, adapting its activities to conditions for the establishment of innovation and development centers (according to the Law on Innovation Projects) [6].

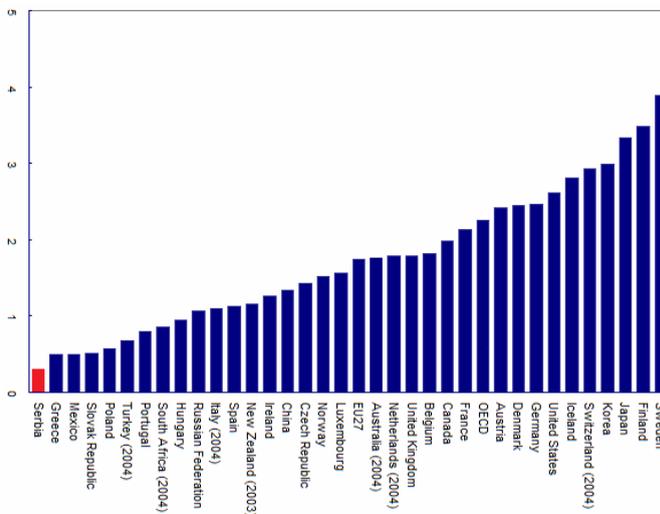
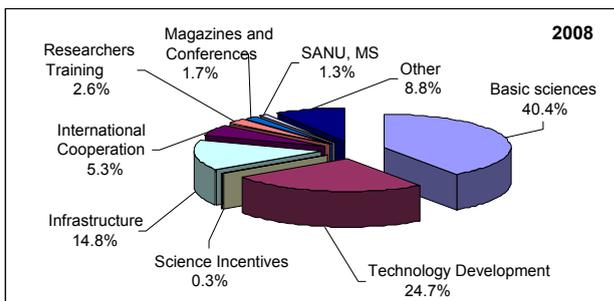


Figure2. The scope of investments in science in some countries



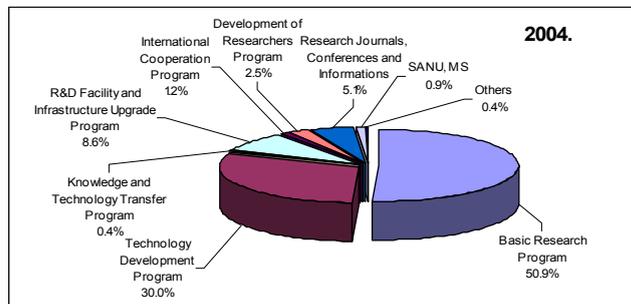


Figure3. The allocation of funds from public resources to programs supported by the Ministry of Science and Technology Development

An example of the allocating funds from the Government budget to specific programs of the Ministry of Science and Technology Development of Serbia is shown in Figure 3. There is an example given to compare the allocation of funds in 2004 and 2008. Table1 shows that about 80% of all funds were directed to projects of basic research and technological development in 2004, dominated by basic sciences. Other programs share was less than 10%. Only 1.2% of funds were directed to the completion of international cooperation program. The situation changed in 2008, so that about 2/3 of the total budget for science were directed to the programs of basic research and technological development (around 65%) with the trend of lowering dominance of basic research, and increasing funds (more than twice) for upgrading infrastructure. The international cooperation increased for four times (to about 5%). Allocation of funds by the area of technological development is shown in the Figure 4. Biotechnologies account for about 40% of all MSTD funds, followed by electronics and telecommunications and materials with a share below 10%, except that now all projects related to energy account for about 13%.

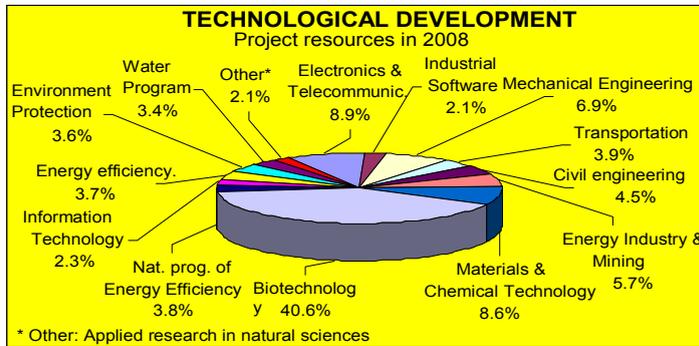


Figure 4 Allocation of funds for projects by the area of Technological Development in 2008

The situation is similar in the allocation of approved research monthly periods (Figure 5) and the number of approved projects in 2008. Again, the biotechnologies take the first place, but it is noticeable that they cover a relatively small number of projects in relation to the funds (which means that projects are more valuable and senior professional researchers have been engaged in them).

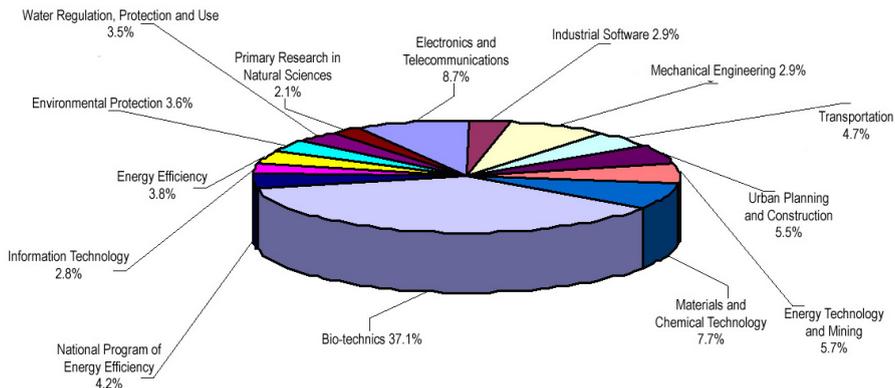


Figure5 Allocation of months required for Technological Development research projects in 2008

According to the basic definition and purpose, the technological development projects should provide the applied

technical solutions, patents; pilot plants, new varieties, innovations and technological advancement, and those are the results that have direct application. Some 3,400 technical solutions were completed in the field of technological development between 2003 and 2007 (according to the preliminary data (Figure 6) [7]

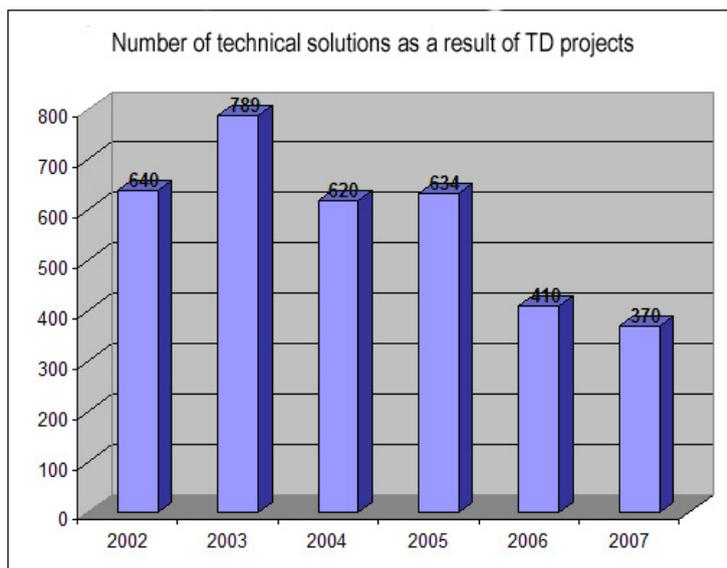


Figure 6 Number of technical solutions as a result of technological development projects in the period from 2000 to 2007

The special result of innovation policy is the activity related to the patent. Table 2 shows the trend of patent application by domestic and foreign inventors. It could be seen that this activity was quite weak and that it particularly decreased around 2000, and after that it began to recover but was still insufficient compared to the activities of during 1990s. The number of foreign patents was particularly high during 199s, than it significantly dropped around 2000, less than the number of domestic patents, and recently it has exceeded the number of domestic patents. Table 3 provides similar review of the number of small patents application. Although this number fell in 2000, there has been a strong growth trend, except for domestic patents that almost exclusively are dominating here.

Table 2 Figures of applied patents in Serbia

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Dome- stic	156	161	96	70	112	59	3	31	73	86	65	127	72	81
Foreign	518	350	186	133	137	49	-	11	58	93	110	138	101	126
Total	674	511	282	203	249	108	3	42	131	179	175	265	173	207

Source: Intellectual Property Bureau

Table 3 Figures of small patents in Serbia

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Dome- stic	54	88	92	65	5	111	86	100	82	88	91	89
Foreign	0	2	1	2	0	1	3	0	1	2	2	2
Total	54	90	93	67	5	112	89	100	83	90	93	91

Source: Intellectual Property Bureau

Some countries like the USA, Sweden, Germany, Switzerland and China, have already accomplished the economy investments in science create two thirds of total investments. The share of economy in Japan has reached the unbelievable 76.1%. Even the countries in our region invest significantly in science: 54% of allocations for science come from industry in the Czech Republic, 38.5% in Estonia, 39.4% in Hungary and 37.2% in Romania.

Therefore, unlike the period from 2000 to 2003 when we were at the bottom of the list of European countries by the number of journals from the SCI list and the citations, falling far behind the nearest neighboring countries, in recent times – in 2006, 2007 and 2008, we managed to exceed some countries in the region (Bulgaria, Croatia, and even to get close to Slovenia).

Finally, although it was a serious improvement in the number and the quality of papers (the sum of impact factors of all papers published in 2008 increased by 2.8 compared to 2003), as well as the citations, we still do not feel a significant influence on the economy,

i.e. the economy of the country, which certainly should be improved in the future.

#### **4. PUBLIC MANAGEMENT ACTIVITIES IN THE FIELD OF SCIENTIFIC YOUTH EDUCATION IN SERBIA**

One of the prerequisites for the education of young scientists in Serbia is the adjusted admission policy and the efficiency of studying at higher education institutions with the priorities of science and technology development in Serbia. The number of enrolled students has almost doubled in the last ten years, but the previous admission policy led to the uneven number of enrolled (and consequently graduated) students in professional and scientific fields. This is, for example, the ratio of graduate students at the University of Belgrade in 2006/2007: technical and technological sciences 31.5%, social sciences and humanities 45.5%, medical sciences 16.9% and natural sciences and mathematics 6.0%. The ratio of graduates to the scientific fields is similar at other universities. It is obvious that a smaller number of students choose to enroll on the faculties of natural and technical sciences, and disproportionately large number enrolls on the faculties of social sciences.

The lack of qualified staff in industry and education in the basic sciences is much more noticeable. Therefore, it is necessary to implement the planned admission policy with a shift towards more balanced ratio. It is extremely important to increase the number of students of natural and technical sciences.

It is the plan of Public Management to define quotas in several fields, but also to provide an indirect stimulus for studying natural and technological sciences, important discipline for scientific and technological development, and therefore the economy. Required ratio of the enrolled budget students is 20% of natural sciences, 35% of technical sciences, 20% of medical sciences and 25% of social sciences and humanities, and providing scholarship should be stricter since the quotas, as an independent measure, may remain unfilled. According to the current figures of completing studies successfully, it is expected that 20% of enrolled students graduate, which is the fifth of 250,000 students in Serbia, i.e. 50,000 graduates a year.

This is the basic prerequisite for doctoral studies policy. Around 2,000 students have completed postgraduate studies and earned master degrees and PhDs in recent years. To reach the required

number of scientists per 1,000 inhabitants (5-7 scientists), it is necessary to double this figure. The best and selected graduate students represent a scientific, research and development potential of the country. Therefore, each area should have a sufficient number of motivated candidates who are interested in further scientific and research work. The previously mentioned policy should provide required quantity in each area in order to achieve the quality (through doctoral studies) which will result in a scientific, research and university teaching youth.

Joint work of the Ministry of Science and Technology Development and the Ministry of Education creates conditions for the best graduate students to continue their education in their country, to complete doctoral studies and continue working in the country. The anticipated measures will create favorable conditions for scientific research through innovations, continued funding of an easy access to scientific research information, better funding of short stays abroad, providing satisfactory personal earnings and covering the costs of studying and research which are not small and certain. Therefore, it is estimated that 5% of graduates in the class in each area (about 2,500 students) will be students at doctoral studies funded from the budget, but still with taking care of maintaining the relations between the scientific fields at the previously mentioned level. Because of the importance of doctoral studies and the commitment to that area, Ministry of Science and Technology Development in cooperation with the Ministry of Education is working on drafting special laws that would regulate the rules of doctoral studies as well as their funding. [3].

#### **5. PUBLIC MANAGEMENT ACTIVITIES IN INNOVATION PROJECTS AFTER PASSING THE LAW**

Activities related to the development of innovation projects are carried out in order to achieve common long-term goals such as developing a stimulating environment for the creation of internationally competitive innovative products in the Republic of Serbia, which would ensure faster economic growth.

In terms of clear and intensive connection of science, research and innovation with the economy, the MSTD will soon pass a new Law on Innovation Projects. This will create the prerequisites for

taking concrete steps in this direction while implementing this strategy.

There is no doubt that so much has been done in that period to develop innovation activities, especially if we take into consideration that up to then we were far behind the rest of the developed world. This period is significant because of the activities that have created a good basis for the concrete progress in the development of future innovation activities. The first distinct step was taken by passing the Law on Innovation Activity in December 2005.

Law on Innovation Activity together with the supplementary rules and regulations has finally brought the long expected legal regulation in this area. This Law is a crucial starting point for any further action. In accordance with Article 11 of the Law on Innovation Activity, Ministry of Science and Technology Development established the Register of innovation organizations and the Register of private entities innovators, as well as procedures required for the entry of interested organizations and private entities in the Register. Since its inception early 2006, there have been registered 66 innovation organizations, five innovation organizations for infrastructural support to the innovation activity and 111 private entities innovators.

The dynamics of the registration of innovation organizations and private entities innovators by years is given in Figure 7.

The first public call for funding innovation projects and applications of private entities innovators was announced by the Ministry of Science and Technology Development at the end of 2006. After the implementation of the first public call, the second was announced at the end of 2007, and its implementation has been still in progress. The public calls were announced to support the development of innovative products and services, the incentives to application and commercialization of scientific research results, the use of modern technology and the creation of innovation organizations infrastructure [6].

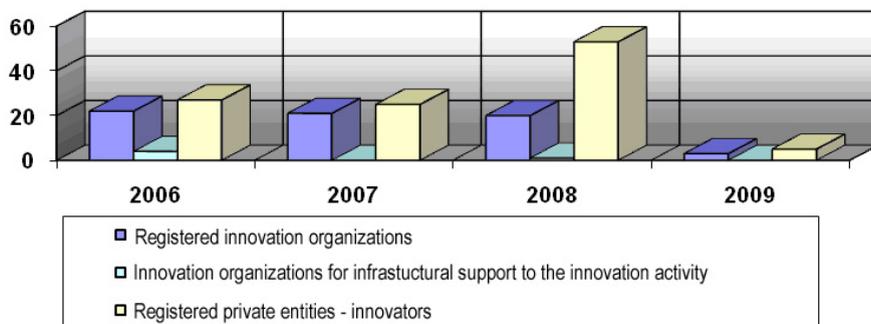


Figure 7 Overview of the dynamics of innovation organizations and private entities innovators registration by years

After the first public call, 53 innovation projects of legal entities were funded in the total amount of RSD 169,933,970.00 out of them seven are infrastructure projects in the total amount of 27,370,095.00 dinars and 16 applications by private entities innovators in the total amount of RSD 9,340,890.00. The overview of funded innovation projects of legal entities by their registered areas is given in Figure 8.

Some 415 innovators were engaged after the first public call and its projects.

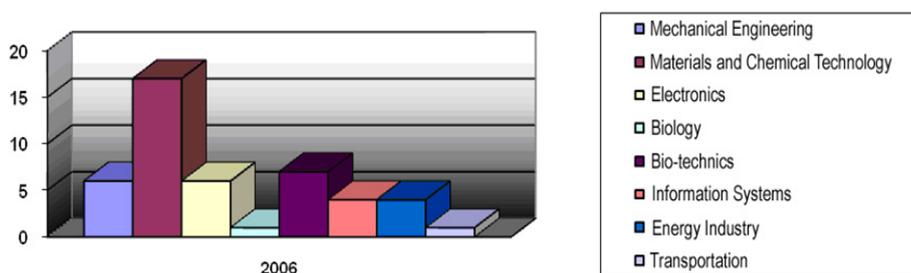


Figure 8 Overview of the funded innovation projects of legal entities by areas (the first public call)

After the second public call, 95 innovation projects of legal entities were funded in the total amount of RSD 337,966,864.00 out of

them 15 are infrastructure projects in the total amount of RSD 49,563,331.00, and 34 applications by private entities innovators in the total amount of RSD 22.434.424, 00. The overview of the funded innovation projects of legal entities by their registered areas is given in the Figure 9. Some 1,200 innovators were engaged after the second public call and its projects.

Comparative analysis of parameters of the first and the second public call is given in Figure 10.

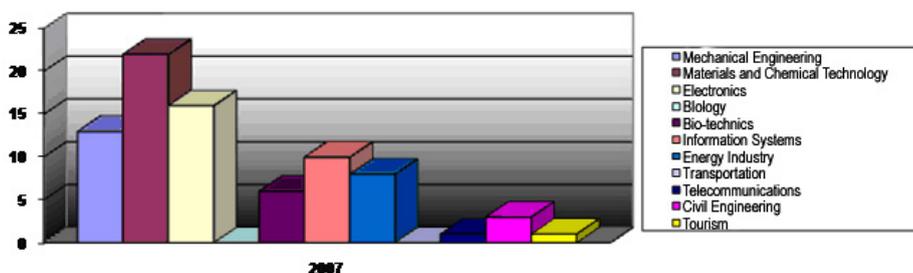


Figure 9 Overview of the funded innovation projects of legal entities by areas (the second public call)

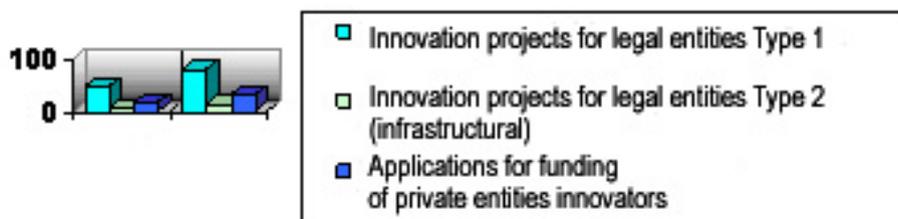


Figure 10 Overview of the funded projects and private entities applications by the public calls

Results and effects of stimulating measures created in innovative projects are still impossible to perceive in a proper and adequate manner because there is not enough time since the start of implementing measures for them to provide their full effect and for the results to be presented through some measurable indicators. However, the Ministry very thoroughly monitors all the effects and the results of the previous actions on the development of innovation

activities, either through periodic and annual reports on projects and registered innovation organizations or through the insight into the actual situation. It is also necessary to emphasize that the first individual results given by these stimulating measures and found in some registered innovation organizations are very successful.

However, it is still no use discussing about some significant statistics regarding the effects of previous stimulating measures. Though, the Ministry of Science and Technology Development has taken very specific measures to create the high grade statistics for monitoring the effects and the influence of incentives at a wider economic and social level. A very detailed and comprehensive questionnaire on the registered innovation organizations has been made in cooperation with the Statistical Office of the Republic of Serbia. It will provide an overview of the innovation activities and high grade statistics for all effects and results delivered in periodic reports by registered innovation organizations. [7]

It is extremely important to emphasize that the Ministry, besides the specific incentive activities mentioned above, is actively involved in a campaign for promotion of innovation activities in the Republic of Serbia. There is also a good cooperation between the Ministry and the Ministry of Economics and Regional Development and the Chamber of Commerce of the Republic of Serbia, and is also involved in the international projects in this field.

The data presented in "The Global Competitiveness Report 2008-2009", provided by the World Economic Forum, are some of the indicators that best determine the position of the Republic of Serbia in relation to other countries in the region and the world. According to the Global Competitiveness Index Serbia is ranked as 85<sup>th</sup> country, ahead of Macedonia, Bosnia and Herzegovina and Albania. In accordance with the Innovation Index, Serbia is ranked as 91<sup>st</sup>, which is also ahead of Macedonia, Bosnia and Herzegovina and Albania, but ahead of Bulgaria as well.[8] Very important indicators are also those given in the document "A new ranking of the world's most innovative countries" by The Economist Intelligence Unit sponsored by the Cisco company. Serbia is currently the 55<sup>th</sup> country according to the research and innovation indicators (number of patents, innovation capabilities, innovation capabilities aggregation, etc.), by which it is ahead of Romania. Indicators given in the research mentioned above and related to predictions for the period between 2009 and 2013, are

quite positive, Serbia is ranked as 54th. However, statistics given in the report also show that Serbia has improved its position since 2002, improving its position from the 67th to the 55th, which is a very significant success, but stagnation of the shift in just one position scheduled for the next four years clearly shows that the State has failed to invest enough in this area [9].

## **6. CONCLUSION**

While pondering over the given facts and the current situation in science and economy of Serbia, the following conclusions and recommendations can be drawn:

The reorganization of a research development system was partly completed in Serbia between 2000 and 2008, but not enough to make it more efficient and rational. That is the reason why it is necessary to change the existing legislation.

Adopting international standards of project evaluation and providing funds for researchers have influenced the increase in the level of scientific production in the area of basic research. Furthermore, the upgrading of the research funding system is required in order to stimulate creativity of scientists, researchers and inventors.

Serbia ought to accept and implement the goals of the Lisbon Declaration by which spending on R & D in Europe should be raised to 3% of the GDP, out of which two thirds would come from the business sector.

Research programs in the field of technological development and technology transfer should be compatible with the Development Strategy of the Republic of Serbia (2009-2014), and the funding system should be changed as a support to those programs that contribute to the economic development (stimulation of applied research and development that create new technologies and prototypes of innovative products, as well as an incentive to innovators and inventors), mechanisms for more rapid transfer of knowledge and technologies should also be developed, and product innovation should be encouraged through efficient production processes and services.

Moreover, it is necessary to change the funding system of the Faculty too, and that the funds for scholarships in both Ministries should be focused on students in major scientific fields.

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**PROF. DR. BORIS STANOJEVIC**

Boris Stanojevic was born on September 14<sup>th</sup> 1967 in Belgrade, Serbia. During high school and faculty he took part in Petnica Science Center, center for talented students. Graduate at Faculty of Electrical Engineering, University of Belgrade with top mark.

He completed his master studies at Faculty of International Management in 1997, where he acquired his Ph.D. on thesis “Management Information Systems – Strategic Approach” in January 2000.

Since 1995 he works at Faculty of International Management, first as teaching assistant on “Management Information Systems” and “Information Technology”. After acquiring Ph.D. degree he became professor of Computer Science and Information Systems at Faculty of International Management, European University.

Prof. dr Boris Stanojevic published numerous books and papers as author or coauthor and participate in many conferences, such as: book, “Management Information Systems”, handbook, “Information Technologies”, Paper, co-author, “Intercultural Communication and Information Technologies”, paper, “Internet and Globalization”, paper, “Strategic Management of Business Information Systems”, paper, “Business Information Systems and Statistics”, handbook, “Internet and E-business”, European University, 2006.

He participates in many projects as part of scientific and research career, such as: “International business as key factor for Serbian economy global integration”, 1996-2000. He also writes articles for magazines for computer science and science popularization.

## **ELECTRONIC BUSINESS AND MODERN MANAGEMENT**

### **Introduction**

The influence of the internet technologies on modern men is large and comprehensive. With increasing popularity of social networking and mobile internet this influence is certainly even higher, and the process of adoption of these technologies is irreversible. Therefore, the impact on modern business is inevitable, so we have to understand what the consequences of these technologies on modern management are.

Information society is a reality and companies are forced to devote increasing attention to ICT solutions in order to survive in the market. As with all new phenomena, there is a lot of searching for the right formula that will bring success, that is the one that will result in greater market share and thus to higher profits. Information and communications technology can be found in all functional units of a company and they strive to better system integration in certain functional units.

It is necessary to note that the implementation of appropriate ERP (Enterprise Resource Planning) solutions lead to success. Also, it is necessary to consider which solution is appropriate for a target company. One of the essential preconditions for successful implementation of a selected solution is the necessity that the solution is fully supported by all levels of management. That is the only possible way to fully enjoy the benefits arising from the application of new information and communications technology. They insist on all management levels, because it is necessary to consider ICT during the development of strategic plans, while lower levels support is required in order to use those technologies in production process.

### **Electronic Business**

In order to comprehend the influence of electronic business on modern management, we have to see the impact of these technologies on business only. The very notion of electronic business has emerged in the last decade of the century, when the IT revolution has become ubiquitous, and when the internet technology has matured enough to

see its benefits. Initially it was difficult to realize the whole domain of business processes that include this technology, so it has been often identified with e-commerce. After the initial euphoria that peaked on the shift of centuries, it has been shown that the electronic commerce alone is not enough, what was the reason of “dot-com” collapse and that a more conservative approach to the whole thing is necessary.

Contrary to some expectations, there had been no withdrawal of these technologies from business, but on the contrary, there had to be a better system that will fit into the classic ways of company development and find a stable position in its business processes. This is just continuing the thread of development, but we now have a mature technology that is strong enough to meet the specific needs of a functional unit or to focus not only on an issue in the business process, but also flexible to be able to cooperate successfully with other systems.

Given the fluidity of the application it is difficult to give a strict definition of electronic business notion. Some authors still consider all types of electronic commerce to be electronic business. Others are related to internet technologies, so they define this notion as performing business functions by using Internet technology. In fact, the development of ICT is such that it is difficult to make divisions. To put it simply, every use of computer systems while performing company business is a part of e-business.

Now we can easily observe business functions to which the e-business made the greatest impact. The e-commerce is the most obvious. We can definitely say that the Internet with its services made the greatest change. Internet commerce has redefined the way of shopping which is the most noticeable in developed parts of the world where is the largest number of Internet and new information communication technologies users. But it has also brought some innovations to the rest of the planet because thinking of global market has also become available to smaller companies. It should be noted that although everything seems available, the Internet has entered into adulthood, so a serious project, which should receive adequate attention, is necessary for entering this market and that, of course, includes adequate investment.

The classification of the Internet users on legal and natural persons (business, customer) and the classification of forms of trade based on its participants has shown that the B2B form is predominant,

that in the developed countries an increasing percentage of this type of trade is through the Internet. There is a positive development trend of B2C trade, so in some areas the position of traditional shops is in danger. The solution is to support both types of trade. The shops with specific goods that reduce downtime for retailers by processing orders online may serve as a positive example. At the end, the popularity that eBay site gained as an excellent example of C2C form shows in which direction one should direct its activities.

Besides traditional trade, customer care is what gives a special edge to new business solutions which include ICT. The role of these technologies in Front office solutions is growing. Communication with clients is more intense and it is necessary to consider all possibilities that new technologies offer. First of all, there is possibility of two-way communication that has not only become available, but its implementation is essential for business success. Knowledge and experience that users have about your products and services used to be difficult to access, implemented through various surveys and campaigns. Today it is easier to implement because the technology is available and users are willing to participate in creating views on current and future product appearance. So the connection of these two factors gives impetus to further product improving and thereby not only keeping the place on the market, but also winning new positions.

Properly implemented CRM (Customer Relationship Management) solution is one of the keys to success. We shouldn't forget that, besides customer care and maintaining contact with them, we need to systematize facts and knowledge we received in that way. Thus formed appropriate knowledge base has to be used in information systems that support other functional units of a company, such as HR (Human Resources), Finance, Development Department... In such a way we completely use this knowledge and also fully justify investment in these technologies.

Internet technology has also enabled easier outsourcing of certain business functions, and CRM is an excellent example. It can also refer to outsource solutions that comprise different countries with different cultures and on different continents. Different relationship to customers has different meaning and different approach to the user, so it can be adjusted to outsource possibilities in different countries. It can be seen that it is necessary to adjust management to working

conditions in multicultural companies, which used to be necessary only for big transnational companies.

Next major impact ICT has on Supply Chain Operation, because the computer communication and electronic data interchange is connected with e-commerce and provides a significant improvement in this area. Originally only the advantage of e-commerce was used, but it was realized that communication has significant potential, which is not only cheaper and faster, but also more comprehensive, especially with the implementation of electronic data interchange. Hereby the business unit is completely covered by information communication technologies and thus raised the business level.

Implementation of e-business technology in finances, human resources and production gives a new meaning to Back Office modernization. It is worth noting that although there is information systems classification on functional company units, those systems cannot stand for themselves. The real power is gained by its mutual interaction that includes the sharing of the same database and knowledge, as well as implementation of appropriate software to support team work and communication among employees. In this way the potential, which information and communications technology offer, can be fully used.

### **Impact on Management**

As we have seen from the above, the information and communications technology development is deeply rooted in modern business processes, not only to support the traditional ways of doing business, but also to create new business functions. This is the fact which cannot be left out when it comes to contemporary management. These technologies have impact on all management levels and vice versa. One of them is to use technology more successfully for performing management functions. Deep and broad support to communication, decision making and team work has lead to the necessity of raising computer management literacy at all positions.

Management has to be familiarized with new technologies, because without knowing its possibilities and mastering its skills that are given by company hierarchy, work cannot be done successfully. Whether we like it or not, technology is all around us and usually we are not aware of how much we actually use it. If the technology is

available, than it is desirable to make the largest possible degree of its utilization.

Another aspect is that plans on all levels, from strategic to operational, cannot work without taking into consideration ICT resources, so appropriate solutions has to be planned as a part of a company development strategy and as well as everyday life which is subject to tactical, operational plans. In order to achieve this, all management levels have to be familiarized with ICT development, provided that the level and depth of knowledge is determined with the place in management hierarchy and area of activity. Inserting informatics and technology experts into the strategic management level is the result of informatics revolution impact, and the development of e-business has led to an increase in this effect. At the beginning, only one place stood out – CIO (Chief Information Officer) or CTO (Chief Technology Officer), but it is not unusual to see all these places separated, which indicates a positive trend of ICT development impact.

At the levels below strategic it is necessary to have a strong management team that can accept the challenges of new technologies and tasks implementation arising from strategy, but also from the dictates of surroundings and technology development. Electronic commerce forms are not constant, since the only constant is change and development. The new trend that is present in the recent years is related to mBusiness when the operations that were intended for internet technologies implemented for the use on personal computers, including portable computers – which also includes the portable ones – notebooks and net-books which are then moved to mobile platforms – phones and tablet devices. In addition, there is tendency for the development of new payment methods, where the NFC (Near Field Communication) technology is already giving results.

This shows that the IT professional managers have to be present at all levels of company management. Also, it is necessary that managers in all functional units of a company, from production, sale, finance and human resources, have IT education and are open to new ideas.

It is necessary to emphasize the influence of e-business on geographical presence of a company, which can only be accomplished by sales of products and services, and parts of companies on other continents. The use of e-business provides contact with clients across

the world. But that same technology can be used for the communication of team members who are geographically distant.

Based on the above, it can be concluded that the modern management has to have the support of information and communications technology. It is necessary that management is encouraged to accept new technologies, because they open new markets and offer the possibility to sell new product and services. Also, the use of e-business facilitates the work of management, particularly on operational level.



**DOC. DR. TATJANA SIBALIJA, Docent**

Dr. Tatjana Sibalija, graduated from the Belgrade University Faculty of Mechanical Engineering department of Production Engineering and won a master degree in 2005. In 2009, she was awarded a PhD degree with honors after defending the thesis *Development of Intelligent Designer Experiment Model for Applying Taguci Model*. Early in 2007 she spent three months on professional training in *Politecnico di Milano*,

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Her professional experience also includes holding engineering and managerial posts at the *STMicroelectronics* international corporation, Malta, - the European leader in micro-electronics industry, and the positions of *Statistical Process Control Champion* and *Total Productive Maintenance Coordinator*. She received the *L. Romano Best Inventor Award (ST Worldwide Manufacturing Excellence)* and *ST Microelectronics - Technological Award* in 2003. Upon her return to Serbia she employed as a professional coordinator at the Petroleum Industry of Serbia (NIS) in Belgrade.

As of 2009, Dr. Sibalija has been teaching as a professor at the European University Faculty of International Engineering Management, Belgrade.

She participated in several international and national scientific-research projects in the area of managing and quality promotion. She is the author of three books, 10 guides in the field of management and quality engineering, and published more than 50 articles in the international professional journals, i.e. presented at international professional conferences.

The European Commission has recruited her as an expert for research projects within FP7 including *the Information and Communication Technologies* and *the Nanosciences, Nanotechnologies, Materials & New Production Technologies*.

Dr. Sibalija has served as a reviewer in several leading international professional journals, and also of a series of paper collections from international conferences. She is a member of the United Association of Serbia for Quality and Standards (UASQS) main board, and the chairperson of the Scientific-Technical Committee on Quality Improvement Six Sigma, and also a member of the international program committee of *the International Working Conference–Total Quality Management – Advanced and Intelligent Approaches*. She is also a member of the national team of the European Technology Platform *Manufacture - EU Program*.

## **EUROPEAN TECHNOLOGY PLATFORMS AS A GENERATOR OF NEW TECHNOLOGIES AND INOVATIONS**

**Abstract:** *The paper presents ManuFuture European Technology Platform for future manufacturing technologies, as one of the most important and most comprehending European Technology Platforms (ETPs). ManuFuture Strategic Research Agenda (SRA) – the roadmap for European industrial transformation with prioritised technology and research areas, and Factories of Future (FoF) initiative as a form of a public-private partnership, are considered in details. A significant contribution of ManuFuture Cluster Serbia to development and implementation of ManuFuture SRA and FoF is shown in last sections, presenting a concrete example of the innovation inspired by ETP program.*

**Key words:** *European Technology Platforms, ManuFuture, Factories of Future*

### **1. INTRODUCTION**

In March 2003, the European Council called for a strengthening of the European research and innovation area by "*creating European technology platforms bringing together technological know-how, industry, regulators and financial institutions to develop a strategic agenda for leading technologies*". European Technology Platforms (ETPs) were set up as industry-led established structures that provide a framework to define medium to long-term research and technological objectives and develop roadmaps to achieve them in a broad range of technological areas. They work on developing and reaching a consensus on a common vision that is established as a strategic research agenda (SRA), presenting a valuable input to define European research funding schemes. Since they are developed through dialogue among industrial and public researchers and national government representatives, and supported by the European Commission (EC), they also contribute to create consensus and to improve alignment of investment efforts. In general, ETPs are bottom-up, industry-led initiatives; the Commission

participates in their events as an observer and is committed to a structured dialogue on research priorities [1, 2].

As presented at figure 1, there are 36 established individual ETPs that work in different research areas as follows [1, 2]:

- Energy (7 ETPs),
- Informational-Communicational Technologies - ICT (9 ETPs),
- Bio-based economy (6 ETPs),
- Production and processes (9 ETPs), and
- Transport (5 ETPs).

The rest of the paper is focused on one of the ETPs of production and processes research area - ManuFuture ETP, ManuFuture SRA, Factories of Future (FoF) Initiative, and Serbian contribution to ManuFuture and FoF development and implementation.

Individual ETPs

Energy	ICT	Bio-based economy	Production and processes	Transport
Biofuels	ARTEMIS	FABRE TP	ECTP	ACARE
SmartGrids	ENIAC	Food	ESTEP	ERRAC
TPWind	ISI	GAH	ETP SMR	ERTRAC
Photovoltaics	eMobility	NanoMedicine	Manufuture	Waterborne
ZEP	NEM	Plants	FTC	ESTP
SNETP	NESSI	Forestry	WSSTP	
RHC	EUROP		SusChem	
	EPoSS		EuMaT	
	Photonics21		IndustrialSafety	

**Figure 1:** Individual European Technology Platforms (ETPs)

## **2. EUROPEAN TECHNOLOGY PLATFORM ON FUTURE MANUFACTURING TECHNOLOGIES: MANUFUTURE**

ManuFuture represents the broad horizontal European initiative creating high level synergy between the vertical sector or technology-specific action plans and the Technology Platforms that are already in place or under preparation, to respond to the purpose of assuring Manufacturing in Europe at EU and national level.

A high level group of European industry experts has prepared a vision document as part of the preparation for a Technology Platform covering the future of manufacturing in Europe. The ManuFuture vision is to transform European manufacturing from a resource-intensive to a knowledge-intensive, innovative sector with all the strengths necessary to achieve and maintain leadership in the global marketplace. ManuFuture High Level Group (MHLG) of experts has got the task to form ManuFuture vision. This led to publication of the document "ManuFuture – *a vision for 2020*", where participants confirmed their common will to establish a European Technology Platform and produce a Strategic Research Agenda (SRA) as the means of developing the underlying concepts [3-6].

In the medium-term – i.e. up to the 2015 time horizon of the ManuFuture vision – foresight studies indicate both demand and opportunities for manufacturing. In summary, the main drivers of change are [3-6]:

- competition, especially from emerging economies,
- the shortening life cycle of enabling technologies,
- environmental and sustainability issues,
- socio-economic environment,
- regulatory climate, and
- values and public acceptance.

### **2.1. MANUFUTURE STRATEGIC RESEARCH AGENDA**

Strategic Research Agenda (SRA), based on the Vision 2020, proposes an ambitious plan inviting European organisations to invest in a set of strategic pillars with targeted research, innovation and educational activities that could transform the competitive basis of Europe producing and delivering products and services which society

desires and expects in global markets. The vision upon which the SRA is based calls for European manufacturing industry to reinvent itself shifting from cost-based global competition, towards a dynamic creator of knowledge-based added value.

Based to ManuFuture vision for 2020, new business models will be required, in which [3, 4]: (i) much closer coordination exists between the demand and supply sides, (ii) self-sustaining innovation permits efficient uptake of new technologies in parallel to the development of new products – thereby reducing time to market, (iii) sharing of knowledge within and between organisations becomes the norm, (iv) supply chains take the form of flexible collaborations, networks of specialised small and medium-sized enterprises (SMEs) and "virtual enterprises", (v) well-defined work procedures and specifications are commonly used to maximise efficiency, (vi) social, environmental and economic considerations get equal weight in decision making, and (vii) provision of services, rather than the outright supply of goods, facilitates the transition towards sustainability.

As presented at figure 2, the competitive and sustainable reaction to such challenges is seen in terms of five pillars and their associated enabling technologies [3 - 6]:

- New, added-value products and services;
- New business models;
- New advanced industrial engineering;
- New emerging manufacturing science and technologies;
- Transformation of existing R&D and education infrastructure to support world-class manufacturing.

#### **ManuFuture Pillar no.1: New Added-Value Products and Products/Services (continuous)**

To improve European products/services competitiveness, European products must evolve into high-added value product/services. According to this, emphasises are on: (i) continuous innovation in manufacturing processes as well as in products, (ii) increase Engineering and Design strengths, as the main European advantages, by enhancing science and R&D position, (iii) enabling technologies, such as innovative materials (smart materials, intelligent and adaptive structures), nanotechnologies, ICT and mechatronics, and incorporate them into product designs, (iv) **customised and with**

**short delivery times products – to fulfil and even exceed customer’s expectations**, regardless of their geographical location; the business focus will increasingly shift from designing and selling physical products only, to selling a system of products and services (described as "product/services" or "extended products") that are jointly capable of fulfilling specific users’ demands, and (v) life-cycle orientation, to gain more opportunities for innovation and market development, more and longer-term customer relationships and better feedback from consumers.

The special emphasise is on the following issues:

- There is a need for the transition from a real factory to the factory of the future that implies digital (virtual) factory, adaptive management and **knowledge-based manufacturing**.
- It is necessary to accomplish the transition from experience-based to knowledge-based industry. It has been stated [5] that " ... *Development and Innovation of industrial products and processes is still experience-oriented. In the knowledge-based industry, the "costs of experience" – loss of productivity and time – can be reduced by modelling of all manufacturing processes in combination with (partial) automated planning and programming.*"

**ManuFuture Pillar no.2: New Business Models** (short to medium term)

Due to visible changes in a global market, such as: (i) globalisation and leaning of the supply chain, (ii) transition from products to services, (iii) reduction in vertical integration in large businesses, (iv) increasing collaboration of small businesses in networks, (v) environmental drivers emphasise whole life cycle view, and (vi) opportunities to leverage European culture and traditions, there is a need also to reap business benefit of new science and emerging markets to create new businesses, industries and sectors.

The following objectives have been recognised:

- Globalisation requires industrial transformation;
- Businesses engage in operational transformation;
- Businesses network capabilities to respond to markets;
- An enlarged Europe enhances the opportunities for businesses ;
- Innovation and entrepreneurship underpins transformation;
- New business models, methods and tools;

- New generations of manufacturing enterprises must be created;
- New capabilities link entrepreneurship to technology management;
- New industries use emerging science to meet emerging markets.

**ManuFuture Pillar no.3: Advanced Industrial Engineering**  
(medium term)

The main research areas, with respect to the time horizon, are as follows:

- Medium term: adaptive, digital and knowledge based manufacturing systems that imply:

1. Standards in manufacturing engineering, systems and processes;
2. Adaptive manufacturing and realisation of intelligent factories;
3. Real-time digital factories-virtual factories;
4. Knowledge-integrated solutions in factories and supply chains;
5. New Taylorism: the role of people in knowledge based manufacturing

- Long term: generic elements for innovating production that imply:

6. Deployment in a knowledge-based European manufacturing environment;
7. Social and cultural systems are drivers of continuous adaptation and innovation.

The following issues are emphasised:

- **Integration of knowledge into processes, products**, machines and factories for delivery of high added-values products and services;
- Service & Life Cycle Value Adding;
- **Product integrated knowledge** and product integrated services;
- New strategies to Life Cycle management;
- New business based on new science.

**ManuFuture Pillar no.4: Emerging Manufacturing Science and Technologies** (long term)

The overall strategic target is technical leadership that implies improvement of performance in scientific and technical engineering and processes through removal of existing scientific and technical barriers. Technical leadership must be achieved not only in basics but also in realisation and implementation (artefacts), and not only in conventional but also in new, emerging technologies for manufacturing.

This could be accomplished through the following strategic objectives:

- **High performance in terms of cost, time, quality;**
- **Dimensions: transition to micro- and nano- scale;**
- **Methodologies: organisation and optimisation;**
- Environmental: clean and sustainable;
- Generative Processes: rapid technologies;
- Adaptive Processes: self-organisation;
- Energy consumption: electric, heat, etc;
- Resource consumption: material, air, oil, etc.

In order to accomplish the above objectives, the emphasis is on the following research topics:

- **Enable new functions:** Function integration, functional materials, **intelligent control, zero defects;**
- **Process Models: Integrate knowledge in process control and online simulation (reduce experiments);**
- Holistic manufacturing systems: self-organisation, self-optimisation;
- Attack cost drivers of the future: Energy, Material;
- Sustainability: clean and environmentally benign manufacturing, zero emissions;
- Standards: Technology, Quality, Tolerancing, Methodology.

#### **ManuFuture Pillar no.5: Transformation of Research and Development (R&D) to support world-class manufacturing (long term)**

European wide cooperating R&D infrastructure, systems and education should:

- favours collaborative research efforts for manufacturing excellence,
- promotes technology transfer and market take-up of R&D results,
- provides competitive technical assistance, and
- improves long-life learning and re-training of aging work force and displaced workers.

An education system must also promote research careers in manufacturing, entrepreneurship and innovative spirit, and support interdisciplinary "thinking and working" in a multicultural environment. Solutions and potential are: (i) Develop the new manufacturing educational system; (ii) European standards of

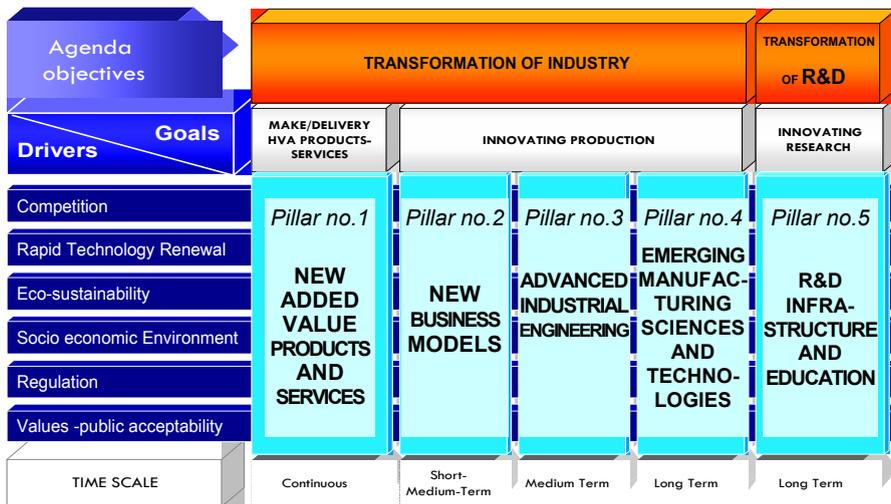
Engineering education; (iii) Teaching factory and life-long learning; and (iv) Re-establish the respect and appeal of manufacturing.

The effectiveness of the ManuFuture SRA for industrial transformation and for enhancing the capability of European regions to attract high value manufacturing industry even from outside Europe is highly dependent upon the readiness of European industry (the majority of which is composed of SMEs) to adapt continuously to change in an open, dynamic and global industrial economic environment. Three criteria of excellence define the ability of organisations to enhance their management of performance within the results-oriented framework that would be created by widespread take-up of this SRA [3,4]:

- delivery of ever-improving value to customers, contributing to greater marketplace success,
- improvement of overall effectiveness and capabilities such as networking, adapting and knowledge acquisition, and
- continuous learning by organisations.

In this sense, innovative SMEs is priority, due to the following facts: (i) innovative SMEs are of outstanding general importance, (ii) they will reinforce the ability to achieve rapid and reliable progress from research results towards marketable products, (iii) they are essential links in the value-chain, and (iv) they are essential in EMIRA (European Manufacturing Innovation and Research Area).

SMEs have to be exposed in the short term to the above opportunities by: (i) exchange of the best practice, and (ii) replacing competition based on cost reduction by focusing on capability development, continuous organisational redesign, and operational excellence.



**Figure 2:** ManuFuture Strategic Research Agenda

## 2.2. PUBLIC-PRIVATE PARTNERSHIP: FACTORIES OF FUTURE

One of the ManuFuture collective initiatives is a public-private partnership (PPP) on Factories of Future (FoF).

As part of the European Economic Recovery Plan and proposed by Commission President José Manuel Barroso, during 2009 ManuFuture has developed a concept for a public-private partnership - the Factories of the Future Initiative, and EC urged its immediate implementation on a 50-50 (public-private) basis. The programme will be financed jointly by industry and EC under the Seventh Framework Programme (FP7).

The objective is to help EU manufacturers, in particular SMEs, to adapt to global competitive pressures by widening the technological base of EU manufacturing through the development and integration the enabling technologies of the future, such as engineering technologies for adaptable machines and industrial processes, ICT, and advanced materials.

**FoF challenges:** The European manufacturing sector faces an intense and growing competitive pressure in global markets. European companies are faced with a continuous competition in the high-tech sectors from other developed economies, such as the U.S., Japan and Korea [7].

**The FoF way forward:** The activities of the PPP FoF will concentrate on increasing the technological base of European manufacturing. The focus will be on the development and integration of enabling technologies, such as engineering technologies, ICT, and advanced materials for adaptable machines and industrial processes. The activities of the initiative will be defined on the basis of the medium and shorter term R&D and innovation needs of the industry and in particular SMEs. Demonstration of newly-developed industrial technologies, ICT and materials will improve the competitiveness of the companies. This initiative is expected to deliver in particular [7, 8]:

- A new European model of production systems for the factories of the future (e.g. transformable factories, networked factories, learning factories) depending on different drivers such as high performance, high customisation, environmental friendliness, high efficiency of resources, human potential and knowledge creation.

- ICT-based production systems and high quality manufacturing technologies capable of optimising their performance with a high degree of autonomy and adaptability for a balanced combination of high throughput and high accuracy production.

- Sustainable manufacturing tools, methodologies and processes that have the capability of cost-efficiently shaping, handling and assembling products composed of complex and novel materials.

In summary, research areas oriented towards industrial application are following:

- **Intelligent Manufacturing,**
- **High-quality and high performance Manufacturing,**
- Manufacturing processes for new materials, and
- Sustainable Manufacturing.

Within **High-quality and high performance Manufacturing**, the special emphasise is on the following topics:

- Mobilisation of **advanced technologies and design paradigms**, for the purpose of an ambitious and balanced combination of high throughput and high accuracy production.

- Technologies that provide more efficient and productive outputs by **high volume, high speed and capability of processes**.

- **Highest standards** need to be maintained even in the event of frequently changing operating or product-mix conditions, with an integrated approach to manufacturing processes and systems.

### **3. MANUFUTURE CLUSTER SERBIA CONTRIBUTION TO MANUFUTURE SRA AND FOF INITIATIVE**

Serbian Manufuture Cluster established at 2006 has worked on the development and implementation of ManuFuture SRA and FoF initiative. Research activities were strongly aligned to SRA for assuring the future of manufacturing in Europe, referring in particular to advanced industrial engineering, zero-defect paradigm, knowledge-based manufacturing and process control, and application-orientated research [6].

Contribution of Serbian Manufuture Cluster, in terms of development and implementation of SRA and FoF initiative, is outlined in the following text.

High quality and performance production is one of the key issues of the manufacturing sector today, mobilising the advanced design paradigms to fulfil the customer requirements. The key challenges refer to the predictive process design strategies to eliminate the trial-and-error approach. This requires the R&D contributions in terms of generic approaches that are applicable at the shop floor. This in particular includes the methods for the design of highly-complex, emerging manufacturing processes, to enable robust, high-performance processes, capable of generating high-quality, reliable and high-added value products. Therefore, it is necessary to design manufacturing processes based on a clear understanding of the customer requirements, by translating them (implicit knowledge) into the process parameter design (explicit knowledge). Since majority of today's processes generate products characterised by several quality characteristics (responses), multi-objective optimisation has become an increasingly important topic in a modern manufacturing.

As a response to the above challenges, ManuFuture Cluster Serbia focused on the following research topic:

- **Enabling methodologies for the design of highly-complex, conventional or non-conventional, emerging manufacturing processes**, in order to **develop processes** that are **robust, high-performance** (low cost, short delivery time, high

capability and quality indices) **and capable of generating high-quality, reliable and high-added value products.**

The necessity for the above topic is outlined as follows:

- Since in today's industrial environment emphasises are on customised products (**to fulfil and even exceed customer's expectations**), the focus increasingly shifts on production of **highly-complex products** or 'extended products', that are capable of fulfilling specific users' demands.

- Therefore, it is necessary to **design manufacturing processes based on a clear understanding of the customer requirements** and usage of products, by translating these data (implicit knowledge) into **process parameter design** (explicit knowledge).

- In order to **integrate knowledge into products and processes, new advanced approaches** for process design must be developed, preferably based on **AI** (Artificial Intelligence) techniques, thus **strengthening knowledge-based manufacturing, knowledge-based design** and, in general, knowledge-intensive paradigm.

- This could offer the way towards **intelligent knowledge-based manufacturing**, in contrast to common process design approach, based on various approximations or "experience-based" decisions.

Since majority of today's industrial products are characterised by **several quality characteristics** (responses), it is necessary to develop **intelligent, generic approach to multi-response process design** that could:

- incorporate customers' demands for several (possible correlated) characteristics, and

- be used to design and/or optimise various types of manufacturing processes (general, universal).

Such approach would be of special importance when **relations among process parameters and responses and/or their interrelations are completely or partly unknown**, which is often a case in today's industrial practice.

The goal of implementation of such knowledge-based approach to process design is to find optimal process parameter set and reduce influence of noise factors, which will in return ensure achievement of the required product characteristic values and reduce

their variations (for all characteristics), thus assuring **high-quality of products** and providing a way **toward zero-defect** paradigm.

This approach could be given in a form of an **intelligent model for off-line or on-line process design, optimisation, modelling and/or simulation**, providing the possibility for learning features (i.e. learning from experiments or prior, historical data about the process).

### **3.1. A RESPONSE TO MANUFUTURE SRA AND FOF: INTELLIGENT SYSTEM FOR MULTIRESPONSE ROBUST PROCESS DESIGN, OPTIMISATION AND MODELLING**

Majority of today's industrial products are characterised by several quality characteristics (responses). Hence, multi-response design, optimisation and modelling have become increasingly important issues in modern industrial environment. In order to strengthen a 'knowledge-based' paradigm in manufacturing and provide a solution for intelligent process design, optimisation, modelling and/or simulation, an integrative, generic and intelligent model for robust multiresponse process design was developed as direct results of a part of Serbian ManuFuture Cluster research efforts.

The developed intelligent system for robust multiresponse process design, optimisation and/or modelling (IS\_RMR\_PD) presents an intelligent and generic approach to multi-response design/optimisation of industrial processes based on experimental data. As shown in figure 3, it comprehends all phases of process design by experimentation: from design of experiment, processing and analysis of experimental data, to process modelling and optimisation [9-15].

In the **Stage I** of IS\_MR\_RPD (figure 3), by using expert system for design of experiment (ES\_DoE) developed within the model, selection of the experimental plan was performed with respect to the number of control and noise process parameters and their levels, enclosing inner and outer orthogonal array.

After performing the experimental trials according to the selected experimental plan and collection of experimental data for all responses, in the **Stage II** (figure 3) experimental data – measured responses were transformed into corresponding Taguchi quality losses (QL). Further data transformation was performed by applying advanced multivariable statistical techniques: principal component

analysis (PCA) to uncorrelated quality losses of responses and grey relational analysis (GRA) to obtain a single synthetic process performance measure ( $\gamma$ ) based on customer specifications for all responses. In contrast to usual practice, here, in order to capture total variance of responses, principal component scores include all principal components. Hence, the model is not based on approximation or assumption, but on pure facts obtained from experimental trials.

Knowing a synthetic performance measure values and process parameter (factor) values for all experimental trials, it is possible to calculate the effects of factors on the synthetic performance measure for all factor levels used in the experiment. By selecting the maximum of factor effects on multiresponse performance statistic  $\gamma_k$ , the optimal parameter conditions can be obtained. The shortcoming of the factor effects approach is that it considers only those discrete factor values that were used in experimental trials. In order to overcome this deficiency, an intelligent module for process optimisation was developed in the stage III.

In the **Stage III** (figure 3) artificial neural networks (ANNs) were employed to model the relationship between a synthetic process performance measure ( $\gamma$ ) and process parameters, presenting an objective function for genetic algorithm (GA). GA ensures convergence to global optimal parameter settings, by searching for the optimal values among all possible solutions in continual multidimensional space. The initial population in GA was seeded with potentially good solution – the of factor effect solution obtained in the stage II. In order to accept the peculiarities of each particular problem, the model implies application of several different GA for each optimisation problem, which enhances the generality of the presented model. Finally, the best GA was chosen according to the best fitness value ( $\gamma$ ) criteria, and its solution was adopted as the final solution of multiresponse problem – optimal parameter settings.

The outcome of the IS\_RMR\_PD is a single process parameters setting that simultaneously meets the specifications of all responses, considering all possible solutions in a continual space. In the presented approach, analytic relationships between quality characteristics and process parameters are completely unknown; the process is considered a "black-box". The presented model does not imply any assumptions regarding the type of process or process

parameters, type of responses, type of relations between responses and process parameters and existence of interactions among them. From the other perspective, the model takes into consideration specific features of each multiobjective problem. The model also provides the possibility for inverse modelling, e.g. predict the value of a performance measure for the given process parameter settings.

**IS\_MR\_RPD key features** are [9-15]:

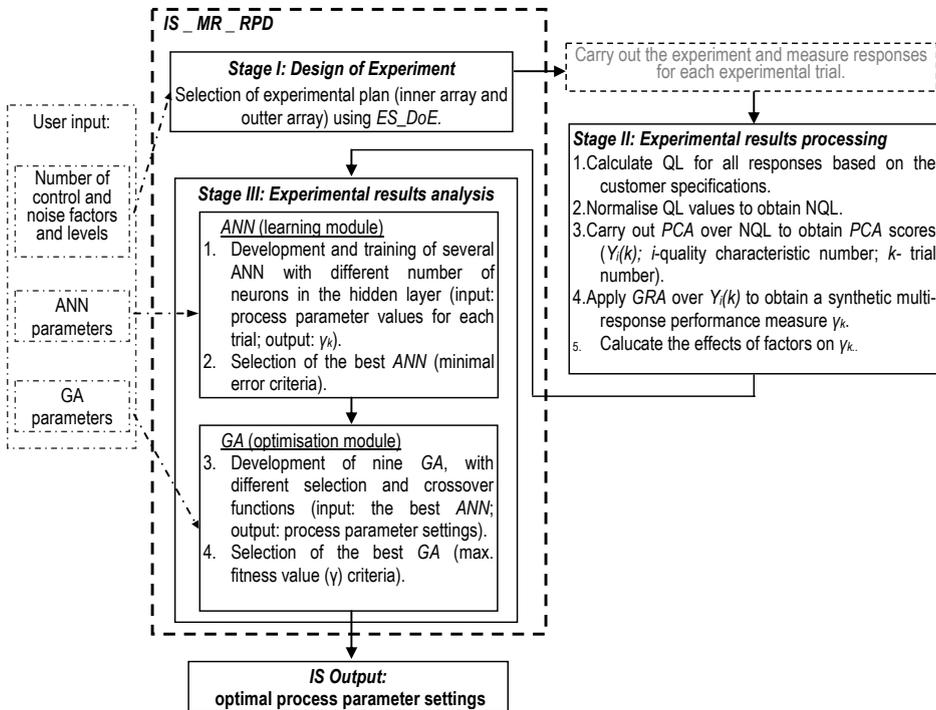
1.) **Stage II** - Experimental results processing:

- Taguchi quality loss function (QL) adequately represents **relative financial significance of each response**, providing a right financial measure of the customer loss caused by a response deviation from a target value.
- Multivariate statistical methods PCA and GRA uncorrelate and synthesise responses with respect to customer specifications, hence response weights are based on the total variance of original data.
- **The model involves correlations among responses and captures the total variance of the original experimental data. Therefore, the model maximise objectivity of the analysis.**
- The model finds “near optimal” parameter/factor settings from (discrete) values used in the experimental trials, which presents a bases for the search in continual multidimensional space of solutions.

2.) **Stage III** - Optimisation module:

- GA considers all continual parameter (factor) values in contrast to traditional experimentation that considers only discrete values used in the experimental trials (factor effects approach).
- GA initial population is seeded with potentially good solution (“near optimal” set – factor effects solution). This feature allows GAs to converge to the global optimum faster, which **maximise capability of IS to find global optimum** in the given number of iterations.
- The model implies development of several different GA for each optimisation problem in order to **accept the specifics of each particular problem and enhances the generality of the model.**

The result of the best GA - the best synthetic multiresponse performance measure ( $\gamma$ ) is adopted as the final optimal solution of a multiresponse problem.



**Figure 3:** Architecture of intelligent system for robust multiresponse process design, optimisation and modelling (IS\_MR\_RPD)

The presented IS\_MR\_RPD has been applied to various multiresponse design, optimisation or modelling of various process, such as processes in semiconductor production and assembly, laser drilling of superalloy, conventional processes a cookware production, surface grinding of a nitride ceramic, etc. **The analysis of the application of the presented process designer** indicated that it showed **better results**, in terms of the optimal parameter settings that yield the maximal synthetic performance measure, **than the other conventional and advanced methods that are currently used in engineering and scientific practice** [9-15].

It could be concluded that development and implementation of IS\_MR\_RPD present a significant contribution to the ManuFuture SRA and FoF initiative, particularly regarding following topics:

- **ManuFuture Pillar no.1** - New Added-Value Products and Products/Services: **IS\_MR\_RPD presents a novel enabling methodology to develop processes that produce high added-value products.**

- **ManuFuture Pillar no.3** - Advanced Industrial Engineering: **IS\_MR\_RPD offers a solution for strengthening “knowledge-based” paradigm** in process design, optimisation and modelling, hence strengthening “knowledge-based” paradigm in manufacturing in general.

- **ManuFuture Pillar no.4** - Emerging manufacturing sciences and technologies: **IS\_MR\_RPD is dedicated to improve process performance (high quality at low cost);** enables tight tolerances which is of especial importance for micro- and nano- scale manufacturing; and **provides a solution for zero-defect manufacturing by integrating knowledge into manufacturing processes.** In general, IS\_MR\_RPD provides a methodology to drastically improve process robustness and product quality.

#### **4. CONCLUDING REMARKS**

Providing a framework and guidelines for research priorities and action plans in order to achieve economic growth, competitiveness and sustainability, European Technology Platforms present a significant generator of new technologies and innovation.

Manufacturing is, and will continue to be, a major component of economy in EU. In a turbulent and highly competitive global environment, it must continuously evolve and embrace transformational change in order to maintain and increase its economic impact. ManuFuture ETP provides guidelines to increase manufacturing ability to add high value, meant as hi-tech competitive advantage, by generating and exploiting new knowledge in manufacturing within a globalisation context. This value is the leverage to achieve dominance in markets, beyond costs. This requires step changes in manufacturing engineering capabilities and the engineering tools that are applied. Skills in new technologies, innovation and entrepreneurship must be enhanced.

The presented contribution from Serbian ManuFuture Cluster presents a significant transition from "approximation- or experience- or assumption- based" decision making to "knowledge-based" decision making in designing, optimisation and modelling of manufacturing processes. Drawing on results of IS\_MR\_RPD model application to various multiresponse problems and taking into account its acceptance by wider scientific and industrial community [10-15], it is expected that the model implementation will contribute to the knowledge-base manufacturing, production of high added-value products, and zero defect manufacturing paradigm, at a global level.

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Mirjana V. Kranjac graduated from the Faculty of Technical Sciences in Novi Sad in 1982. She defended her Master paper at the Belgrade University Institute for Multidisciplinary Research in 1993, and was awarded the degree **Master of Biomedical Engineering**.

Ms Kranjac graduated from the Faculty of Technical Sciences in Novi Sad and United Business Institutes, Brussels, as the best in her class and gained the degree **MBA Master of Business Management**. After defending her Doctoral dissertation titled, “*Models of EU fund projects realization in the Autonomous Province of Vojvodina*” at the Faculty of Technical Sciences, Novi Sad, in 2010, she gained the degree **Doctor of Technical Sciences**.

Mirjana Kranjac was a head of the Development Department at Telekom Srbija Corporation in Novi Sad between 1982 and 2002. During the period 2003-2010, she served as a deputy director in P.E. of PTT Communications "Serbia" for cable distribution systems for the Vojvodina region. Also, she has thought Managing Projects and Strategic Management at the European University in Belgrade as the assistant professor since 2010.

Ms Kranjac is among founders and a member of the team that worked out “The Broadband telecommunication development strategy of the Province of Vojvodina for the period 2007–2010”. She serves as the vice president of the Telecommunication Council of Vojvodina, and is an active member of the Serbian Chamber of Engineers and a lecturer on its gatherings. Mirjana Kranjac has been granted licences for project design and construction for the field of electro-techniques.

Ms Kranjac has dealt with numerous project proposals for application for Cross-Border Cooperation within IPA. She was appointed the project reviewer for IPA program. Also, she is a reviewer for the prominent international scientific journal "Ekonomika", ISSN 1392-1258, Vilnius University, Lithuania. Ms Kranjac published more than 40 papers in national and international journals. On many occasions she attended specialized courses in France (Alcatel), Denmark (Commscope), Belgium (Cisco) and the United States (Harmonic).

Mirjana Kranjac is fluent in English and German, and has a working knowledge of French. She is married with two children.

## **PROJECT MANAGEMENT DEVELOPMENT IN SERBIA**

### ***Abstract:***

*The article presents development and state of project management in Serbia and points out the significant problems in this field. An investigation done in Vojvodina has shown lack of experts in this field. Introduction of formal education and certification of project managers as well as their long life learning is suggested.*

**Keywords:** *project management, education, certification, long life learning*

### **1. INTRODUCTION**

Project management as a management discipline underpins much economic activity. In industries as diverse as pharmaceuticals, software and aerospace, projects drive business, in the public sector, too. We know which industries contributed the most to that overall GDP figure, and which contributed least. But we know nothing - at least in terms of officially tabulated government statistics - about the extent of project management's contribution to that GDP.

So what is the contribution of project management to a modern developed economy? What exactly is the contribution to the Serbian's economy?

Serbia has unfortunately not such research, Results of USA American researchers employed by the Project Management Institute have an answer - of sorts. On the basis of data released by the Bureau of Economic Analysis, part of the US Department of Commerce, they estimated in 2001 that the US public and private sectors combined spend some \$2.3trn on projects every year, an amount equivalent to a quarter of America's GDP. Construction, R&D, software development, organisational change, IT systems - add it all together and that's the price tag. Extrapolating further, they estimated that project-related spending accounted for almost \$10trn of the world's global GDP which is \$58.23trn. That means that about 17% of world's global GDP comes from projects (Wheatley, 2009).

Serbia has not such researches, neither data.

## **2. PROJECT MANAGEMENT AND INNOVATION**

Almost by definition, innovation relies on project management. Irrespective of whether the innovation concerns a new product, or a new process, or indeed a contribution to pure science, better project management, on the whole, will bring a successful outcome reached more quickly, having consumed fewer resources. The measurement of innovation is almost as slippery a concept as the measurement of project management.

Data for UK show that overall, 7% of value added in manufacturing industry is project-based innovation. While some industries fall far below this level - such as textiles, where just 0.4% of value added takes the form of innovation - others massively exceed it: the pharmaceutical industry, for example, has 44.2% of value added generated through innovation.

Put another way, almost half the value added by the industry owes its immediate provenance to projects (Wheatley, 2009).

Researches done in other countries show similar results. For example, the invention and application of new technologies, products and production processes is a key driver of productivity growth, which has accounted for no less than two-thirds of overall UK economic growth over the past 50 years. Without effective project management - even using the more primitive project management methodologies - this would not have been possible (HM Treasury, 2001).

Presented data proves how important project management is to each country and global economy. All kinds and sizes of organisations in both the public and private sectors should sit up and take note of this because without well-trained and capable project managers the percentage of GDP spent through projects is inflated due to many exceeding their budget through poor management. Considering the impact that successful project management has on fast-growing SMEs, more project managers must have the recognition they deserve in helping to make these organisations even more innovative and successful.

„The skills required by a project manager are different to those of an operational manager. An operational manager does not necessarily make a good project manager - and vice versa. Project management is about focusing everyone on a goal, and managing the resources and workload to achieve that goal. All this in a high stress,

deadline driven environment. Projects requires trained professionals with project management expertise“. These are words about importance of project managers. (Turbit, 2005).

Use of projects and project management are of increasing importance. They help in development and creating of something new that hadn't exist before, in any area of human activity. Their importance is growing in solving of business and global strategic crisis (Hauc, 2004).

For Serbia is very important to observe significant possibilities of well implemented project management to overcome world economic crisis and bed economical situation in Serbia. That implies well and permanent function of knowledge management.

### **3.EXAMPLE OF PROJECT MANAGEMENT IMPORTANCE: EU FUNDED PROJECTS**

The importance of project management knowledge for Serbia will be shown by using example of EU funds utilization.

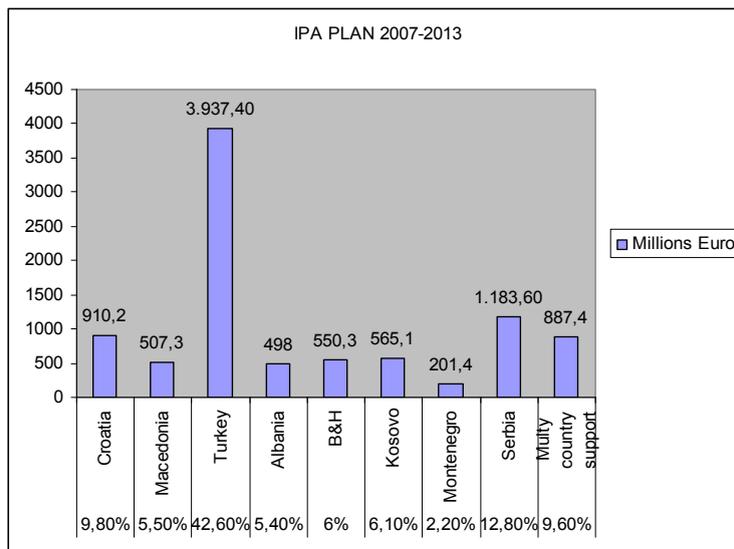
From 2000 till 2006 Serbia received about 1.7 billion Euros from the EU through program CARDS, previous generation of help programs aimed for Balkan countries. Results for CARDS 2000 - 2006 show that 87% of allocated resources were contracted and 71% of them were used properly.

Serbia as an potential candidate country for the entrance into the EU has possibility to use different EU funds formed for the actual EU budget 2007-2013 and among them Instrument for pre accession assistance (IPA) that replaced previously used CARDS program. This could be an significant financial resource to overcome financial crisis and to move Serbian economy forward, having in mind economical exhaustion of the country and lack of other possibilities.

The financial value of IPA for the period 2007-2013 is 9.24 billion Euros (Instrument for pre-accession assistance, 2008). Plan for resources allocation according to countries is presented in Figure 1.

Till now Serbia could get help of 572.4 million euros from the EU through IPA, which means about 200 million per year, or 27.26 euros per capita per year. But IPA has been realized with only 39% of allocated financial resources, until now (Instrument for Pre-Accession Assistance IPA, 2008).

The main reasons for this are: not enough developed institutional capacities, lack of qualified experts, big gap between usual practice and requirements of modern business, Serbian business culture.



**Figure 1.** Plan for IPA assistance during the period 2007-2013  
**Source:** Kranjac (2010)

We must focus on financial resources from all EU funds available for Serbia till 2013 and even much more bigger amounts that will be offered to Serbia through structural funds after becoming EU member. This resources are dependent on the value of realized resources through projects in the previous period.

In the case Serbia will not have human resources for management of these projects the already offered EU financial resources will be lost or will go to other countries whose experts will be and are already present in Serbia inside of different project consulting organizations, waiting for the chance if Serbia doesn't catch it!

#### **4. STATE OF PROJECT MANAGEMENT IN SERBIA TODAY**

As well as in other countries and in Serbia project manager is requested occupation and well paid. But how to gather knowledge for such a responsible occupation?

Analysis of university programs in Serbia presents that most of them don't include project management as compulsory subject. Some have it as optional subject (Faculty of economy in Subotica) and some don't have it. Good example is Faculty of organizational sciences, Belgrade. This proves that importance of project management as useful tool and efficiency and affectivity generator of each sector is not recognized. No high school has this in its program.

With poor knowledge gathered through formal education process people could participate in projects but not as project managers. In addition, companies, foreign investors, and special big infrastructure objects as well as lively projects of SMEs which are seen as a base of future development of Serbia, seek certified project managers.

There are two international organisations which are dealing with building awareness of project management and training in certification of project managers:

1. IPMA (International project management association) which represents European school of project management with headquarter in Nijkerk in the Netherlands and

2. USAID which represents American school of project management organized in PMI (Project management institute) with headquarter in Pennsylvania, USA.

Both organization offer certification trainings and exams. What are the differences?

**PMI** is association of individuals, **IPMA** is association of organizations. Both institutes have their chapters in Serbia.

**PMI** has its chapter called: „PMI Yugoslavian Chapter“ which is organized by people having private companies.

**IPMA** has its chapter called “YUPMA – Udruženje za upravljanje projektima Srbije“ which is organized by professors from Faculty of organisational sciences, Belgrade.

Each association has their one system of project manager certifications.

- **PMI** offers 5 certification levels (Table 1):

**Table 1:** Certification levels of PMI

PMP	Project Management Professional
CAPM	Certified Associate in PM
PgMP	Program Management Professional
PMI-SP	PMI Scheduling Professional
PMI-RMP	PMI Risk Management Professional

- **IPMA** offers 4 certification levels (Table 2):

**Table 2:** Certification levels of IPMA

A	Certified Project Director
B	Certified Senior Project Director
C	Certified Project Manager
D	Certified Project Management Associate

PMI is real-project oriented. IPMA is more theoretical. The prices of certification trainings are between 200 and 2000 euros depending on the organization and requested level.

What about number of certificated project managers?

In May 2010 there were 68 certified PMPs and 150 PMI YU chapter members. At that time Slovenia had 29 certified PMPs and 68 PMI chapter members, Croatia had 108 PMPs and 240 PMI chapter members. Data for IPMA members are not available.

### 3.DATA ABOUT PROJECT MANAGEMENT CAPACITIES IN SERBIA - RESULTS OF RESEARCH

**Research object:** Use of IPA funds in Serbia

**Research aim:** To make IPA funding more effective.

**Research tasks:** To discover problems, to increase awareness about them and suggest improvements.

**Research methodology:** Survey research performed within 108 Serbian organizations evaluating a range of issues.

**Research subjects:** Selected organizations are eligible organizations which are listed in the IPA program documents. Selected organizations consist of two groups:

-Organizations which have already applied for IPA funding and are the most typical users of IPA funding,

-Random sample of eligible organizations which have not yet applied for IPA funding.

Structure of selected organizations is presented in Graph 1.

General data about candidates show that 62,5% organizations have department for project management. 12,5%.organizations have department specialized for EU funded projects. 42.5% of respondents have had any training for PCM. 50% have experience in project implementation. The main problems during project implementations are presented in Table 3.

**Table 3:** Main problems during project implementation, **Source:** Author

<i>The main problems during project implementations</i>	<i>Answers (%)</i>
Procedures are complex	27
Lack of domestic funds for co financing	19
Financial problems (cash flow)	16
Lack of human resources	15
Lack of knowledge	10
Reports	9
Impossibility to realize planed	2
Visibility	2

70% respondents have experience in preparing project proposals and applications, what is a big percentage. Fewer, 50% of respondents were included in project implementation. They gained necessary knowledge from different sources as shown in Graph 2. Mostly, 34% were taught during round tables, info days, we can say from informal sources.

## **5. INVESTIGATION ABOUT EU FUNDED PROJECTS REALIZATION**

Focusing on projects funded from EU programs as very important group of nowadays projects, we can show existing situation and problems. CARDS is EU program of aid for development and stabilisation. It is designed for Western Balkan countries. Serbia received 1.3 millions euros through CARDS. CARDS show that local governments become responsible for their own development by being able to compete for obtaining external funding, develop its capacity for project application and implementation. They achieve results in proportion to the efforts.

Based on the data for the CARDS program in Table 4 can be seen that committed funds not automatically indicate the funds which were actually used. This reflects the readiness of each country to manage the funds because the funds are paid out in stages and, depending on the successful implementation of projects in the previous phase. The experience shows that countries with more project management knowledge better utilize resources committed. Serbia had the worst results comparing with neighbouring countries by contracting 87% of allocated resources and realization of even less, only 71%.

## **6. NEW ASPECTS OF PROJECT MANAGEMENT - EU FUNDED FOCUS**

Many people in Serbia learn about project management through the application process for EU funds aimed for Serbia. They learn from special trainings organized for this special group of projects.

Cross-border cooperation among Western Balkan countries is taking place for the first time in the framework of the Instrument for Pre-Accession Assistance. IPA CBC programmes closely mirror the rules of Structural Funds, thus their implementation provides a learning opportunity for the beneficiary countries, preparing them for the EU Cohesion Policy.

Recognizing the need to aid these efforts on the Regional level, the European Commission launched the CBIB – Cross Border Institution Building project in June 2006. The project is currently in its second phase, envisaged to last until November 2011.

CBIB II operates from five regional offices: Belgrade, Podgorica, Sarajevo, Skopje and Tirana covering: Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Serbia, Montenegro as well as Kosovo under UNSCR 1244/99.

In launching such a regional initiative, the EC was aiming to:

- provide a coherent and harmonized assistance and guidance at regional level for the programming and implementation of current and future IPA CBC programmes among Western Balkan countries;
- build capacities of national, regional and local authorities, as well as of non state actors, so as to ensure full and effective participation in EU funded projects;

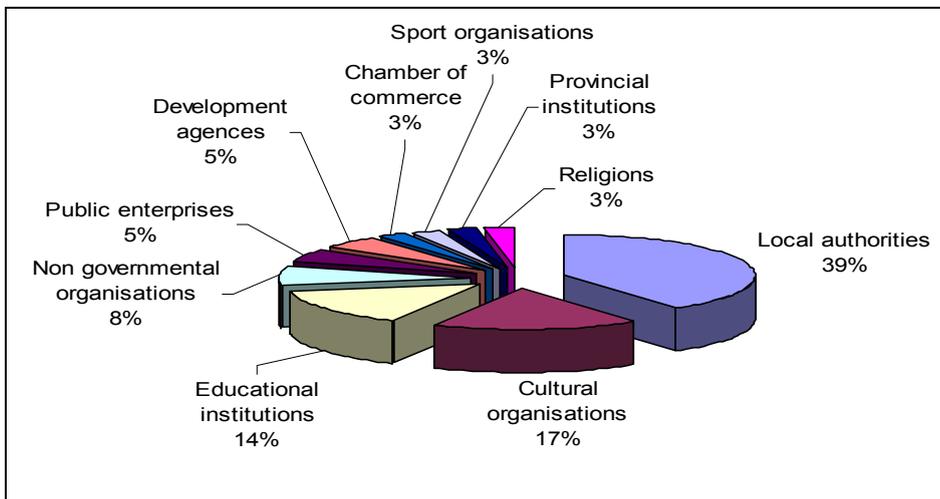
There are some other EU programs like: Taix and Twinning that also help in building capacity for project management.

There are some new aspects of EU projects not recognized before, but very interesting for all kinds of projects. These are:

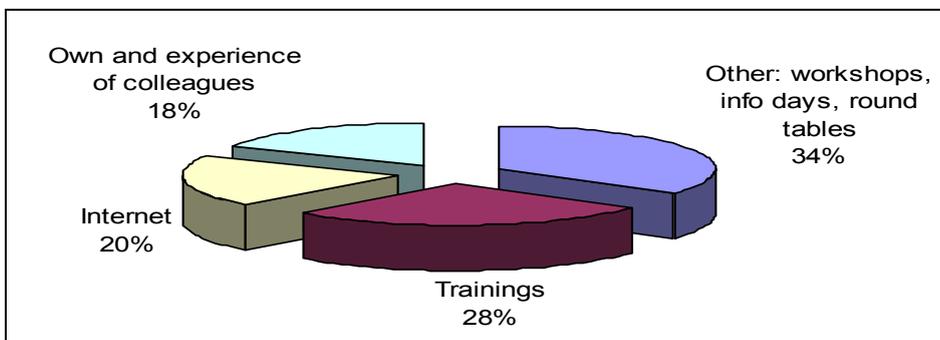
- sustainability of the project. This is its capability to continue its sustainable life cycle after the end of the project funded period.
- indicators as measures of project or program short run and long run success.
- project fiche as an short overview of the project with all its milestones.
- project logical framework (logframe) that gives all facts and their logical relations necessary for a creation of a good project.
- detailed description of roles of project team members with personal data of each of them.
- PRAG as set of financial rules of EU.

Structural and cohesion funds will be available to Serbia when Serbia becomes EU member. They constitute a significant share of the EU budget, and their basic purpose is reducing the development gap between rich and poor regions of EU member states and to promote economic and social equality. The Structural Funds comprise about a third of the EU budget: 90% of this amount is spent on development of the region, and 10% on the development of so-called. cohesion countries (Greece, Ireland, Portugal and Spain). The budget of the Structural Funds and Cohesion Fund for the period 2007-2013 is amounted to 347 billion euros. How are these funds important for Member States says the allocation of funds, in billions of euros, for some Member States in this period: Czech Republic (26.7), Hungary

(25.2), Germany (26.3), Bulgaria (6.8), Romania (19.6), and so on. It is expected that allocation for Serbia will be about 15 billions of euros (Kranjac, 2010). This sum should be taken seriously and this is reason for Serbian state to respect the problem of recruitment project management staff and not to allowed foreign consulting companies to do project management instead of Serbia. Many such companies, mostly from Slovenia and neighbouring countries are already in Serbia, waiting for the chance.



**Graph 1:** Structure of respondents, **Source:** Author



**Graph 2:** Sources of knowledge, **Source:** Author

**Table. 4.** Allocation of CARDS fund in some Western Balkan countries during period 2000-2006, **Source:** Kranjac, 2010

Realization of CARDS 2000-2006 (mill euros)	Allocated resources	Contracted resources (%)	Realized (used) resources (%)
Serbia	1.300	87	71
Montenegro	130	93	80
Kosovo	1.100	96	90
Macedonia	320	91	79
Total:	2.860	91	80

## **7. PROJECT MANAGEMENT MILESTONES IN SERBIA**

The analysis shows that there are significant points - milestones in the process of project management implementation in Serbia, as following:

1. Informing target groups about facts and possibilities of project management as tool to improve effectiveness and efficiency of the economy
2. Creation of important knowledge base for all involved in managing projects of all kinds.
3. Data base of best practices: successfully performed projects
4. Intensive, formalized permanent education process.
5. Assistance in each phase of project management process.

Generally, they could be divided into three groups:

- informing of stakeholders
- long life education of stakeholders
- assistance in realization of any project phase.

## **8. CONCLUSION**

Economy is based on project oriented way of thinking. There is a lack of project management knowledge. Acquisition of knowledge about projects must start long before appearance of project idea. This knowledge must be universal and useable for all types of projects. Today existing informal education has to be formalized through creating society of knowledge. The best way is to include project management into formal educational process, from the level of basic and high schools. Serbia must have clearly developed and recognized project managers certification process, organized inside of one body.

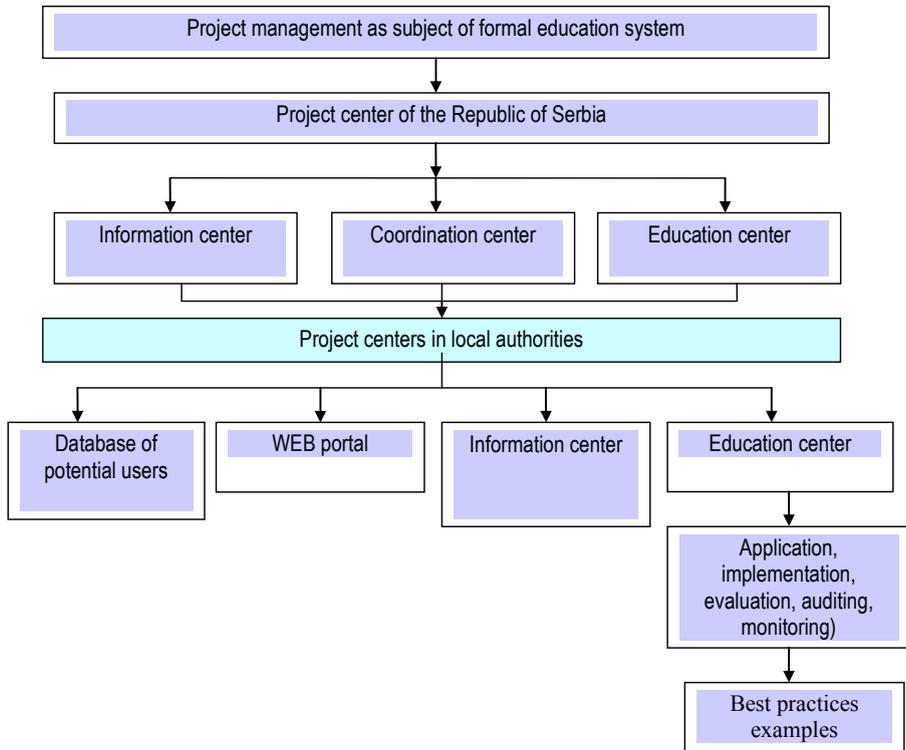
Proposals for further improvements of project management process in Serbia (Graph 3):

1. Idea is to set up “Project centre of the Republic of Serbia” as a main centre witch will be information, coordination and education centre.
2. At the level of each local authority administration centre will be local project centre coordinated by the main centre. The Centre must ensure appropriate, timely information for stakeholders.  
There must be available web portal at the Centre which will show the best practices examples. It will be used for experience exchanges and links to all required web sites. This will be the point for permanent education about project management.
3. Project centres will be place for workshops, trainings, round tables and info days.
4. Presentation of good applications and well implemented projects from expert that have realized these will be organized. Presentations of badly done projects, too.
5. Advisory help of project centre will provide detailed explanations to all.

Civil society with its expert organizations is ready to be included into project management development system because of its importance and will help to increase awareness of its implementation.

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**Graph 3.** New model for improved project management process in Serbia

**Source:** Author



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**Working experiences:** Jun 1998 – September 2002.- part time job at family owned company N-formula, as an assistant of sales, and executive manager for promotion; September 2002 - February 2006 - Assistant at European University, Faculty of International management; February 2006 - Account director at US licensed marketing agency Studio marketing J. Walter Thompson; September 2008 – Part time professor at European University (subjects Management, Leadership, Business management); March 2009 – Marketing and PR manager at EKO SERBIA , member of Hellenic Petroleum group, retail network of petrol stations.

**Projects:** September, 2004 - Marketing project, Investment corporation - Šabac; January, 2005. – Project of reorganization and planning corporate changes and images, Nocca – group, Belgrade; Maj 2005, Project –Implementing teams in organization – Mišar promet – Šabac; Still doing – Project for Team management, organizing, staffing and training – Galeb group; 2006, 2007, 2008, 2009 - developing marketing strategy for multinational clients Kraft Foods, Mazda, Gas, Mothercare, Nokia, Chipita, Reckit Benkiser, 2007 and 2009- organizing sport event Davis Cup match Serbia – Australia and Federation Cup match Serbia Japan for Serbian tennis Federation

## **LEADERSHIP AND PROCESS OF LOBBING**

### **Abstract**

*For the success of contemporary companies, it is necessary to set the balance between rational, effective and efficient managers and leaders with vision. Leaders are those especially responsible for motivation approach to people, transferring key ideas, and the vision into specific goals of teams and individuals. Leadership as a part of business environment, and as a process of influencing people to achieve organizational goals, gradually exceeds the limits of its internal environment, besides acting within teams of associates, and is getting a form of lobbying. Having in mind changes, dynamics and complexity of the environment, leaders are those considered responsible for the process of lobbying and initiating, introducing and implementing changes in the organizations, but in the environment as well.*

*Key words: Leadership, Changes, Lobbying, Transformation Leader, Manager, Organization, Process, Environment*

### **1. INTRODUCTION**

Changes affect the business world every day, faster than any other type of organization. The modern trend of globalization, the internationalization of business, the integrations at economic, political and cultural level, are further complicating already complex working conditions. Therefore, the recipe for the companies success could be to develop a sense of change.

Contemporary managers have to accept change as a challenge rather than as a necessary risk, they have to be flexible in their plans and decisions they make, and they have to be aware that nothing is permanent and unchangeable. It will take a long time for many of the existing companies to become compatible with current demands.

Psychological transition and a new corporate culture must lead to the flexible organization, teamwork and responsive organization.

Such changes have been implemented successfully only in those companies that have been led by successful transformational leaders.

Leaders who influence teams within companies and who initiate changes are not willing to use their skills in collecting and transferring information, explaining and transferring vision into concrete situations, outside the team of associates and companies.

Depending on the size of companies and the interest groups that they represent, leaders can also influence other people and organizations that make decisions of importance to their business and activities in the community. In this context, leaders and managers can lobby, directly or through a professional lobbyist.

In a broader context, leaders are lobbying within and outside the company and thus influence people and decision-making process in order to achieve organizational goals.

Lobbying and leadership has been considered as being different. Leadership, always in a positive context, is explained as a desirable behavior, a visionary action and a charismatic managing activity. Lobbying on the other hand, partly because of the ignorance and partly because of the lack of legislation that would define the profession, it is often shrouded in secrecy and carries a negative connotation.

The concept of lobbying is usually used in the political context, but the practice has shown that the link between business and politics, either within the local economy or international business of multinational companies, is actually lobbying. Historically, lobbying has always existed, but it hasn't been known as such.

## **2. LEADERSHIP IN MODERN BUSINESS**

Leadership is a very interesting topic for discussion. It is a word that people use almost every day while communicating their experience at work or their responses to examples given by political, business and sports leaders.

Despite many definitions of leaders, these components can be established as crucial:

- Leadership is a process.
- The influence is exercised through leadership.
- Leadership occurs in the context of a group.
- Leadership assumes the achievement of goals.

Therefore, leadership can be defined as a process whereby one individual influences a group of individuals to achieve a common goal.<sup>137</sup>

We can hear leaders often being mentioned on the television or the radio, we read about them in newspapers. However, do most people know what is meant by the term leader? The word itself is derived from English verb *to lead*, and the word *leadership* is also very often identified with the word *managing* in the Serbian language. But, neither all leaders are managers in companies, nor all executives and managers have the qualities of true leaders.

Although they are present in all spheres of life, such as art, medicine, politics and fashion, leaders are particularly important in the area of international business and management. Multinational companies and their leaders are considered responsible for the phenomenon commonly known as globalization.

Leaders are those who have used their abilities, skills and communication, without fear of changes, to transform not only their companies into global organizations but the whole world into a global village.

The managing function is the means that managers use to help people to realize that their work can also fulfil their own needs. They also help them take the opportunities, while contributing the achievement of the company's objectives.

That means that managers utilize their knowledge of positions that people hold in the company, as well as knowledge of each of them individually. Managing deals with change, and management deals with complexity.

There is also a difference in the interpretation of terms *a manager* and *a leader*. It is important to emphasize that leadership and managing are not the same concepts, despite the fact that leadership is associated with managing and that it is important for management. The author Voren Benis claims that there is too much of managing and too little of leadership in many organizations.

Some people can be successful managers, good planners and fair, organized executives, but lacking the organizational skills of a leader. Others may be successful leaders who are able to stimulate

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<sup>137</sup> Northouse Peter, *Leadership*, Data Status, 2008, Belgrade

good mood and affection, but they lack the managerial ability to channel the energy they have incited in others.

Among other views, managers are considered as those who carry out their duties and worry about how to perform tasks, while leaders tend to gain the understanding, trust and loyalty of people. Leaders are those who provide a framework of reality, direction, initiate structure, facilitate, encourage consent, provide support, remove barriers, serve as a model and control the conduct of others.<sup>138</sup>

When talking about the differences between leadership and management, it can be said that management is dealing with complexity, while leadership is associated with coping with changes.

In the recent years, the role of managers has significantly been determined by the increasing number of mergers between companies.

If there is a lack of good management, the complex institutions become chaotic and often must be closed. The role of management is to provide stability and order among some key dimensions of the company such as the quality and profitability of products.

What are the changes that leaders are confronted with? One of the reasons why changes are considered more important in the world of business is an increasing competitiveness of local and global companies. There is less understanding and loyalty by consumers. Rapid technical-technological changes, growing international competition, market deregulation, overcrowding in developed industries, constant changes in the stock market, unstable supply, an effort to find new sources of raw materials, changes in demographic trends of the workforce, are just some of the factors that determine the demeanor and position of modern business.

The result of this situation is the fact that if a job is done the same as yesterday, or even 5% better, there is no guarantee of success. Major changes are necessary to survive and effectively compete in the new environment. More changes require more leadership as well.

Regardless to whether we are talking about leadership or management, both systems include making decisions about what needs to be done, creating networks of people and relationships that will allow them to achieve what is planned, and eventually ensuring that people are actually doing what needs to be done.

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<sup>138</sup> Pierce John; Newstrom John, *Leaders and Leadership process*, 2005

Managers and leaders can do it in different ways. The concept of lobbying can be understood as a link between these two concepts because it appears as such in both professions. Those professions are further complicated by the fact that apart from the complex environment within the company and the activities within groups in organizations, lobbying is mainly carried out in the conditions of a dynamic external environment, i.e. economic, political and cultural environment.

Each culture provides a different indication of the importance of leadership and lobbying. Although most authors can agree on the definition of the term, there is no universal recipe by which managers can use the managing function and their role of a lobbyist in the internal and external environment to influence the behavior of employees or decision makers and to encourage their work and particular decisions.

In order to achieve goals, managers need to combine human and material resources. The key to success is a clear definition of duties and certain degree of authority which managers must possess. *The second* postulation is the achievement of goals. *The third* postulation is a constant collection of information, data binding, and creation of new sources and continued expansion of contacts. If there is a need to implement the process of lobbying, it must be done timely, with efficient utilization of contacts, information and resources to influence decision-makers, while simultaneously representing interest groups.

Managing can be defined as a process of social influence. It includes defining the objectives of the group or organization, motivating the required behavior to realize these goals, and influencing the maintenance of the group and its culture. Managing enables directing the activities of group members towards the accomplishment of tasks. However, managing generates changes too. It is a group phenomenon because there is no leader without followers.

In the past, the leadership has always been described as being "masculine, military, and of the west." Views on the managing process are changing nowadays, both in theory and practice. Most people are now firmly convinced that women are efficient and able to manage their organizations as well as men.

The number of women who successfully hold the positions in senior management is constantly growing, both in public and private

sectors. However, the number of women lobbyists has been much lower and it can be explained by the *glass ceiling* effect, the term well known in leadership that has been transferred to the process of lobbying as well. The invisible barrier preventing women from ascending into elite leadership positions was initially dubbed the glass ceiling, the expression introduced by two Wall Street Journal reporters in 1986. Even in female-dominated professions, women have faced the glass ceiling.<sup>139</sup>

The views on the managing process have been improved significantly in the recent years. What is currently regarded as clear and accepted is that the effective managing is a process for which an individual is responsible, rather than focusing on human qualities of that individual. That means that leaders cannot be satisfied anymore with their personal ability to initiate efficient processes in their organizations.

The world around us is changing at such a pace that the "learning-leader", "intelligent leadership" and "leaders-lobbyists" concepts are to be the concepts of the future.

Who are actually the leaders? Are they born or made? How important are leaders in business, and how do they exercise influence on others?

In order to understand the fundamentals of leadership, the development of different opinions on this topic in the recent decades should be considered to clarify abilities of leaders and their behavior and results, to question the dilemma whether leadership is accepted nowadays and how it contributes to the development in the world of steady changes.

The managing skill has already reached a high level and generally speaking, executives and directors do not lack an expertise in this field, or at least they have opportunities to acquire it.

There are lots of qualified executives, directors and managers today. They are important for the functioning of a company, but in order to become a unique structure moving successfully towards its goal, and in which each individual is its part with the same objective, a new type of executive is needed in a company – a leader.<sup>140</sup>

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<sup>139</sup> Northouse Peter, *Leadership, Data Status, 2008*, Belgrade; Source: *Zecevic M., Rilke B., Management, Belgrade, 2003*.

<sup>140</sup> Karlzon Jan, *The Moments of Truth, Clio, Belgrade, 1997*, p.123

<b>OLD MANAGER</b>	<b>NEW MANAGER</b>
<ul style="list-style-type: none"><li>• Thinks of himself as of a manager or a boss</li><li>• Follows the chain of commands</li><li>• Works within defined organizational culture</li><li>• Makes decisions by himself</li><li>• Gathers information for his needs only</li><li>• Seeks to master one area, for example marketing or finance</li><li>• Demands long working hours</li></ul>	<ul style="list-style-type: none"><li>• Thinks of himself as of a sponsor, a team leader or an internal consultant</li><li>• Works with everyone who is needed to get the job done</li><li>• Changes the organizational structure in response to market changes</li><li>• Calls on others to get involved in decision making</li><li>• Exchanges information with others</li><li>• Seeks to master a wide range of managerial disciplines</li><li>• Demands results</li></ul>

Changes require dealing with a number of important and related issues concerning the organization and its employees. What is the risk that members of the management board and other employees take? Are there any hidden motives that encourage or prevent the introduction and implementation of changes? What are the internal and external forces that determine changes?

The most appropriate type of change that can be introduced into any organization is the readiness for further changes!<sup>141</sup>

Those organizations that can encourage the so-called passion for change or action, not reaction, and those that have strong and consistent values that permeate every level of the organization are considered as successful. However, there is often unbridgeable gap between the vision of an organization and its culture.

In the past, managing organization was similar to managing symphony orchestra. It is now believed that it is more similar to managing jazz ensemble. There have been more improvisations.<sup>6</sup>

The concept of leaderships implies creating a vision of future, a strategy for its realization, its transfer to others so that everyone can

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<sup>141</sup> Hooper Alan and Potter John, *Intelligent Leadership*, McGraw Hill, New York, preface

understand and accept it. Thus, leadership can be explained by four elements that correspond to the components of leadership:

- Leadership involves other people - workers or employees if it is a company or just followers (of some ideas, etc.).
- Leadership also implies an unequal distribution of power between leaders and group members.
- The ability to use various forms of power to influence behavior of followers.
- The fourth element is a combination of these three elements, acknowledging that the leadership involves the values of followers too.

Leaders are expected to perform their tasks efficiently, and employees expect them to be satisfied with their job. A leader must possess an inspirational and inspiring ability to make complex content easy to understand. Thanks to their coaching skills, leaders cause the transformation of everyone's ability to communicate and transform the confidence, attitude, performance and results of others. Since joining the world of lobbying, leaders have been using their abilities to achieve goals of the company, besides being involved in the transmission of information and clarification of situation for decision-makers in the external environment.

Leaders inspire the best in colleagues and teams, stimulating a higher level of innovation, creativity and clarity of purpose and vision.

Today's leaders, besides being great politicians and artists, hold the top positions in the biggest world companies. Their personal characteristics, ability to lead big systems, their work with teams and the success achieved at global level have always been the example of a proper way of managing.

A leader is sometimes compatible with the name of a company, and it often occurs that people cannot even imagine the functioning of a company without the man who has made it the market leader.

Although it has been thought for a long time that leaders are born, the practise has shown that you can learn a lot about leadership if you have a good mentor and a role model. Learning by imitation, provided with personal experience, is essential. The advantage of today's generation is the accessibility of information on many great people and a big choice of whom and what to imitate. We can also

choose the new role models to replace those that we have overgrown. The best role models should inspire and lead us towards reaching our full potential. Although you can learn a lot about leadership, besides basic communicative skills everything is acquired by experience, education and contacts in the process of lobbying.

When talking about the value of an emotionally intelligent leader, we don't want to revive a rejected claim that the success of an organization or a state depends on a single charismatic leader. As a sociologist Max Weber argued even a hundred years ago, institutions with tradition haven't been progressing because of the charisma of a leader but because they have been fostering leadership in the entire system.<sup>142</sup>

### **3. MANAGEMENT, LEADERSHIP AND LOBBYING**

Whether managers and leaders are the same, similar or diametrically opposed has always been the topic for a debate in the world of business. Yet many have agreed that no matter how different they are, managers and leaders have to work complementary in the modern world of business and constant business changes. Hardly one without the other can survive.

While managers provide business stability, leaders are looking for a change, but only those organizations that can coordinate both sides have the chances for progress.

What is common to management and leadership is the process of influencing people and environment in order to reach company's goals, but also the process of lobbying in case of interest groups representation.

The word lobbying is derived from the word *lobby* = a vestibule, first of all the vestibule of Parliament. According to the same source, a lobbyist is a politician who seeks to win people's representatives (Members of Parliament) by private conversations.<sup>143</sup>

The way of lobbying, as well as the used funds and represented interests may certainly differ, but this practice is becoming

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<sup>142</sup> Hooper Alan and Potter John, *Intelligent Leadership*, McGraw Hill, New York, preface; Zecevic Milija, *Global and Transnational Business and Management*, European University, Belgrade, 2008.

<sup>143</sup> <http://msd-celinac.com/dokumenti/rjecnik-pol.pdf>

increasingly common in modern business, while some cultures recognize the profession of a lobbyist as such.

In the area of management and business, the lobbying exceeds the limits of political lobbying and can be put into a broader context and defined as a process of influencing decision-makers, whose decisions are of interest to the organization and the team they represent.

However, the practice of influencing legislative power by multinational companies or powerful domestic entrepreneurs is not rare. What is rare is the legal definition and regulation of the profession so that in most countries it is some kind of a secret action, the concept shrouded in mystery and usually a term that has a negative connotation and that is associated with corruption. Unlike lobbying, the leadership in most cases has a positive connotation.

The modern world is hard to imagine without the process of lobbying, which now exists in all areas of life. Interdependence of national economies, elimination of international borders and creation of a single European market have created a framework in which agents who wouldn't apply the lobbying procedures, would hard be able to achieve any success, whether it were states, international organizations or companies.

Accordingly, a leader's job is becoming more complex and more important because it exceeds the limits of a company as much as possible.

Lobbying, in the context of leadership in business sphere, could be explained by moving the lobbyist into the official state institutions, or competing companies for joint action, professional groups and associations, formal and informal gatherings, which include personal meetings with decision-makers, discussions on specific topics and information exchange.

Lobbyists do not bribe decision-makers they inform them about the topics that are interesting and useful to them.<sup>144</sup>

Decision-makers are interested to hear the views and opinions of their constituents, customers, clients, and partners. Through lobbyists, they are directly informed about the problems of their constituents, the consumer preferences and the needs of market and

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<sup>144</sup> Kascelan Balsa, Profit journal no. 12, Capital media, Belgrade, 2009.

target groups, so lobbyists, in some sense, represent mediators between people and authorities, or companies.

This means that lobbying, in fact, represents the fight against corruption, in a way that the activities that are aimed at protecting the interests will be put into a legal framework that the state will be able to control.

In this way, corruption is pointless, because the interested parties (companies and individuals) will be able to represent and protect their interests in a lawful way through a mediator, i.e. lobbyist.

#### **4. THE PROCESS OF INFLUENCING**

You can pay someone to be physically present, but you cannot buy loyalty, enthusiasm and devotion. You have to earn it.

Successful companies have leaders who concentrate more on the future than cling to the past.<sup>145</sup>

The leaders encourage the best in people, and spend a lot of time in creating the leaders of people around themselves. But they spend most of the time in communicating and that is why it is one of their most advanced abilities.

Leaders communicate with their employees and clients, i.e. the internal and external environment. Thanks to these skills, they are able to influence even where they don't have formal authority, at higher levels, with their equals or clients. Leaders have a clear vision of what they stand for. Their vision is not a secret - they share it with people around themselves.

Management develops the capacity to realize plans by good organization and personnel, i.e. by creating an organizational structure and job description, filling the positions with qualified people, communicating with them and explaining what and how something should be done, delegating responsibility.

The activities of leaders also include the regulation of relations with people. That means good communication and presentation of new directives and directions of action to those groups that can understand and accept the vision and that can dedicate themselves to its realization. That is the reason why leadership is much closer to lobbying than management. At the same time, many lobbyists are not

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<sup>145</sup> Zecevic Milija, Management, European University, 2005, Belgrade

leaders, but it is advisable for leaders to master this process, although they will not use it every day like professional lobbyists.

Finally, management ensures the achievement of planned goals by controlling and problem-solving. In order to control the work, a constant monitoring is needed, i.e. monitoring of results against plans, in a formal and informal way, through reports, meetings, observation of some deviations, and then planning and finding a solution for this situation.

However, the realization of a vision requires motivation and inspiration. People should move in the right direction regardless of obstacles that may arise or changes that must be made, appealing to basic human needs, values and emotions.

## **5. LEADERSHIP AND POWER**

Leaders are usually associated with power. Power is extremely important for successful managing. Where does that power come from?

Power represents the ability to concentrate human, informational or material resources on doing something. The concept of ability makes difference between the power and the authority. The authority is the right to do something and it is officially sanctioned, until power is the ability to achieve results.<sup>146</sup> The question is whether power is a good or bad thing. The answer is both. A powerful leader may have difficulties in influencing behavior of his subordinates, but, on the other hand, the influence can be exerted without a specific source of power.

The process of delegating power, by proxy, to those who need it to perform the work, is very common today.

The sources of leadership power can vary. Power that is attributed to leaders can be prescribed by position - positional power, or based on personal attributes of an individual and his relationship with the followers - personal power.

Positional power:

- legitimate power (particular position in the organization carries obligations and responsibilities, people accept it until the abuse)

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<sup>146</sup> Northouse Piter, *Lidership*, p. 5, Data Status, 2008, Belgrade

- coercive power (power to punish, discipline, it is more important as potential than current type of impact)
- reward power (promotion, better job, working hours, in order to be successful employees should consider a prize valuable)
- informational power (the power of leaders to approach and distribute the information which are desirable or essential for others)

Personal power:

- expert power (expertise in performing certain tasks and problem solving, professionalism in certain areas)
- referent power (ability to influence others based on personal charisma, reputation, etc.).

Almost every function that is performed in an organization can be highly improved in terms of those who perform it and the overall productivity of the company, if managers meet the expectations of their employees concerning money, status, power or pleasure for the well done job.

## **6. LEADER'S POSITION AND THE PROCESS OF LOBBYING**

In a modern sense, lobbying can be defined in different ways, such as the communication between people, the techniques of advocacy, i.e. the art of persuasion, and a series of actions which are intended to influence decision-makers.

According to Webster's dictionary, lobbying involves addressing members of parliament in order to influence legislation.

Lobbying is not just influencing, but above all analyzing and understanding a problem, so that its essence and effects can be explained to decision-makers.

Encyclopedia Britannica defines lobbying as any attempt by individuals or groups to influence the decisions of government. In its original meaning it referred to efforts to influence the votes of legislators in the 19<sup>th</sup> century, generally in the lobby outside the legislative chamber. That effort could be a direct appeal to those who have made decisions in executive and legislative body, or it could be indirect (through attempts to influence public opinion). It could

include verbal or written persuasion efforts, funding campaigns, PR campaigns, researches which have been submitted to legislative committees and formal testimony before such committees.

Lobbyists can be members of special interests groups, professionals ready to represent any such group, or they can be individuals. The US Federal Law on Lobbying (1946) requires that lobbyists, and the groups they represent, have to be registered and have to submit a report on contributions and expenditures. Opinions and views on leadership have changed over time. Often it was enough to publish an article about it that would totally reverse things.

There is an entrenched belief by which leaders, in the simplest terms, are seen as shepherds who protect their flock from lurking dangers and changes in the environment. Lobbying confirms this opinion, although in practice leaders leave more time and space to their followers for an independent work.

Many authors, however, disagree with that attitude. Leaders who really care about their followers expose them to the reality as it is and urge them to cope. Rather than giving people false assurance that what they are doing is good enough, leaders insist that their followers should surpass them. They force discussion and public debate rather than resolve misunderstandings.

True leaders soon discover advantages that could be gained by encouraging people to make effort and struggle with all their powers instead of creating comfort among them. Few people are openly grateful for that, not realizing that this is for their benefit, thereby becoming ready for all challenges that may arise in the market.

Leaders are expected to provide comfort, stability and solutions to problems. The story about the leader can be symbolically presented through the relationship between doctors and patients. Doctors are sometimes leaders who should face the task to urge their patients to begin with critical changes in their behavior.

Neither any operation nor technical matter can better contribute to the recovery as the people who change the way of their life and work. Patients need to understand the significance of these changes, but also what specifically they need to change and do. Such a symbolic representation can be transferred to the companies that are increasingly facing such problems. They face the necessity to adapt and respond to challenges.

Changes in societies and markets, competition and technologies around the world are forcing organizations to clarify their values, develop new strategies and master a new way of doing business. It is very important to adapt your work in situations when our deep beliefs are challenged, when values that make us successful become less relevant, when legitimate, yet competitive perspectives become united.

We face challenges every day in different types of jobs and positions, when companies are restructuring or reorganizing, when they develop or introduce a strategy, or unite their businesses. Adaptive problems are systematic, and there is no ready solution for them. Without accepting these challenges and solving problems, each company may cease to exist.

Leader's job is to influence people to adapt and to accept challenges in a competitive environment. Yet for many senior executives, providing leadership behavior, not just authority is quite difficult. Usually there are two reasons. First of all, if they want to initiate the process of change, executives must change the way of behavior that they have so long practiced. And secondly, adaptive change is distressing for the people going through it. They need to take on new roles, relationships, values, behavior and approach to work.

The leaders are those who must change the way of doing business. It can be concluded that, from the practices and stories of leaders who have already encountered such problems, certain principles of adaptive work are standing out. Harvard Business Review magazine offers, among others, these two principles: "getting on the balcony" and identifying an adaptive challenge. In fact, given symbolism explains leaders' characteristics and behavior on the examples of sports and business leaders.

Ervin "Magic" Jonson's greatness in leading his basketball team came in part from his ability to play hard while keeping the whole game situation in mind, as if he stood in a press box or on a balcony above the field of play. In sports, most players simply may not see who is open for a pass, who misses a block, or how the offence and defense work together. That happens because they are so engaged in the game that they get carried away by it. Their attention is captured by the rapid motion, the physical contact, the roar of the crowd, and the pressure to execute.

Business leaders have to be able to view patterns as if they were on a balcony. It does them no good to be swept up in the field of action. Leaders have to recognize context for change or create one, but they don't have to become prisoners of the system.<sup>147</sup> This way of perceiving changes in the environment is symbolically named "getting on the balcony", and this observation could be extended to the term "getting in the lobby". The term lobbying has a negative connotation, because it suggests that this is nothing more than bribing decision-makers or those who can influence them. Why such a bad reputation follows the lobbying profession is hard to say, because it is a web of different circumstances.

First of all, lobbying used to be regarded as a secret collusion between the authorities and lobbyists, as a procedure that occurs far away from the eyes of the public and which is reluctantly spoken about. Lobbying, which was originally imported from the United States, has brought some negative connotations too.

For many years lobbyists have been referred to as actors of many affairs and scandals in the USA. Such an image and reputation, together with the lobbying profession have expanded into Europe. A small number of lobbyists, who uses illegal means, induced an entrenched negative opinion about entire profession, and many professionals find it difficult to influence the eradication of the already established prejudice.

The work of a lobbyist is similar to the work of any good PR practitioner. It begins with careful research. This means gaining the right audience with the necessary facts. The lobbyists keep up with the development of public policy and identify policy-makers and decision makers who are to be addressed on a matter of importance to their organization or client.

There are five basic areas in which lobbyists' assistance can be invaluable for the organization:

- Coalition establishment.
- Carrying out research and preparing reports.
- Making contact with influential people.
- Witnesses and speakers preparation.
- Debate focusing.

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<sup>147</sup> Harward Business Review, No 11, Special issue- Breakthrough Leadership, December 2001, p.132

Perhaps one of the roles of lobbyists, which echoed the most, was the statement of John F. Kennedy, then senator from Massachusetts:

...Lobbyists are in many cases expert technicians and capable of explaining complex and difficult subjects in a clear, understandable fashion. They engage in personal discussions with Members of Congress in which they can explain in detail the reasons for positions they advocate. Lobbyists prepare a concise review of the case, memoranda, legal analysis, and prepare draft legislation for the use of the board and members of Congress; they are necessarily masters of their cases and, in fact, they can often provide useful statistics and information not otherwise available.<sup>148</sup>

## **5. CONCLUSION**

Changes are the only certain thing that awaits us in life and work. Rapid changes are the main feature of the time in which we live.

Managers are ready to accept changes and it is one of the main features of this profession. A manager is a profession in development, in some countries in the initial stage and carries an aspiration to cope with unpredictable world that surrounds us. Although constantly faced with different challenges, changes are not always a pleasant experience, but bring a lesson that the only way to deal with a change is to accept the same, rather than avoid it. This is the challenge that all organizations face, and they can't survive without "learning leaders".

Leaders who influence teams within companies and who initiate changes are not willing to use their skills in collecting and transferring information, explaining and transferring vision into concrete situations, outside the team of associates and companies. In this way, leaders become involved in the process of lobbying.

Leaders are expected to perform their tasks efficiently, and employees expect them to be satisfied with their job. A leader must possess an inspirational and inspiring ability to make complex content easy to understand. Thanks to their coaching skills, leaders cause the transformation of everyone's ability to communicate and transform the confidence, attitude, performance and results of others.

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<sup>148</sup> <http://www.zorantomic.net/wiki/mediawiki/index.php?title=Lobiranje/blog>

Leaders inspire the best in colleagues and teams, stimulating a higher level of innovation, creativity and clarity of purpose and vision. It is something that modern business environment expects of them and business associates in the region, as well as of the relations with competitors and key players in the area of politics, economy and investments.

There are six rules of a successful leader:<sup>149</sup>

1. Coordination of team activities—leader's role is to coordinate people-to help, to direct activities, to support, not only to control.

2. Advice on problems or possibility of selection – keeping the focus on team goals and the importance of business plan and quality, a leader has an important role of leading the team to priorities.

Provision of resources - staff cannot effectively operate without adequate resources. A leader plays an important role in the timely response to the needs and capabilities of the team, especially in large organizations where it is difficult to monitor what is happening in each team.

Managing problem solving – there are procedures to be observed, models for problem solving and the techniques that a leader must master through direct work with the team, and above all, keeping the goals in the forefront.

3. Assistance with implementation- many team members find the organization they work for pretty unclear, they are not sure how to make presentations, how to communicate within the company and outside, and so the leader has the role of a trainer and a teacher.

4. Providing formal and informal recognitions - in most organizations the formal types of recognitions are rare, difficult to implement, and limited, while the informal recognitions proved to be a great way to motivate staff between pay rise and promotion.

Leaders inspire team members to do what they want, through intimidation or some other more desirable way of motivation. Those are the modes which represent power base. The power is important leadership component. Based on data from the survey of leaders' activities around the world, it is concluded that positional and personal power are the most common, as well as expert-professional power, the

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<sup>149</sup> Holpp Lawrence, *Managing teams*, McGraw-Hill, USA, p.102

power of reward and punishment, and the power related to political contacts and social relationships.

Leaders, often self-taught, become involved in this field, partly due to the lack of professional lobbyists or unregulated lobbying framework. In these cases, leaders who become lobbyists use their communication skills, the position in the company, the power and contacts to meet influential people and to clarify issues and present the idea, project, problems to those who participate in the decision-making process that directly or indirectly affects certain topics.

The companies deal with the work complexity by planning and budgeting, by setting targets and objectives (usually for a month in advance or a year), going step by step to reach already set goals. By contrast, leading an organization to a constructive change begins by setting the direction - developing a vision for the future (often the distant future) along with a strategy for introducing changes that are necessary to realize the vision.

Management develops the capacity to realize plans by good organization and personnel, i.e. by creating an organizational structure and job description, filling the positions with qualified people, communicating with them and explaining what and how something should be done, delegating responsibility. The activities of leaders also include the regulation of relations with people. That means good communication and presentation of new directives and courses of action to those groups that can understand and accept the vision and that can dedicate themselves to its realization..

Finally, management ensures the achievement of planned goals by controlling and problem-solving.

In order to control the work, a constant monitoring is needed, i.e. monitoring of results against plans, in a formal and informal way, through reports, meetings, observation of some deviations, and then planning and finding a solution for this situation.

However, the realization of a vision requires motivation and inspiration. People should move in the right direction regardless of obstacles that may arise or changes that must be taken, appealing to basic human needs, values and emotions. In broader context of understanding the concept of lobbying, we can say that leaders lobby within groups in the organization in order to achieve organizational plans.

Lobbyists carry out their activities in the external environment, and thereby much more dynamic and complex environment that is susceptible to changes, whether it is economic, political, social or ecological environment.

In a modern sense, lobbying can be defined in different ways, such as the communication between people, the techniques of advocacy, i.e. the art of persuasion, and a series of actions which are intended to influence decision-makers.

The practice of the U.S. companies shows that most of them have been run by too many managers, but few leaders. That is why the trend of developing the capacity through leaders training is not surprising. Leaders do not appear by themselves, and successful companies are aware of it. Therefore, they do not wait for that they need a leader, or that the leaders will impose themselves; they are actively looking for potentials.

If it seems that someone has characteristics of a good leader, he is exposed to training and experiences that are created to develop that potential more. Most of the so-selected, cultivated and trained people begin to play an increasingly important role, when it comes to leader's positions in an organization. But one must always be aware of the fact that strong leadership is helpless if there is poor management.

A real challenge lies in discovering the right balance and combination of strong leadership and good management. In today's practice, besides the process of influencing people within company and transferring vision into teams in an organization, a question of influencing and transferring information outside the company is also important, as well as the process of lobbying decision-makers, whose decisions are of interest to the company or interest group.

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**DOC. DR. SRDJAN TOMIC, Docent**

Srdjan Tomic PhD was born on June 17<sup>th</sup>, 1976 in Vrsac, Serbia. He graduated from the European University Faculty of International Management, Belgrade, in 1999. He gained Master of Science degree in International Management at the same Faculty in 2004. In September 2010, he received the doctorate in *Quality Management with Particular Reference to International Standards and ISO Standards*.

After finishing his studies, he was employed by the Vrsac Brewery, as a marketing manager, and later as a marketing director. He spent more than five years in this organization (working from June 2000 until September 2005).

In September 2005, he took a position of a business administrator at the MMT Ltd. Company in Vrsac, where he stayed until December 2006.

In December 2006 he became the manager of the “Steria” National Theatre in Vrsac. He remained in this position until October 2008, when he got a job as a teaching assistant at the European University, Belgrade.

Srdjan Tomic PhD, who gained a lot of experience in management and business, has started to apply science approach to his working knowledge, especially in the field of quality management. His accomplishments while working with the Serbian Chamber of Commerce in the assessment and the collecting documentation for the Vrsac Brewery privatization are evident.

## **QUALITY MANAGEMENT IN FOOD INDUSTRY**

*ABSTRACT: Management strategy is the management's answer to the changes, the way to achieve the competitive advantage, to create diversity, to introduce new methods of performing a job that others lack, to become superior, to position itself in the minds of customers as different from its competitors, with different and complete range of products for specific customer groups, which are on the one hand acceptable for customers (where it is possible to segment them), and on the other hand for competitors. Thus, strategy does not anticipate success, it anticipates competitiveness. Considering importance the food has globally, as well as profitability of food industry it is clear that food quality assurance is one of the most important areas of quality management, due to that many standards were published in this area, some causing a lot of controversies today.*

*KEY WORDS: Strategic market relations; Food Quality management, HACCP, ISO 22000, Codex Alimentarius; Customers*

### **1. INTRODUCTION**

The *quality* is the outcome of a special *regime*, the term of complete professional attitude in work; the *existence* of quality is the result of permanent struggle for new, highly positioned performances. Only the particularity of the company and products it generates and places on the market, can generate a base of its market freedom. *Particularity is the need expressed by others.* For top management, the *others* are *customers*—above all, but other stakeholders as well. Therefore, the top management should streamline its focus on customers, more precisely, they should clear the way which leads over a spiraled staircase to the hidden corners of customers thoughts. When someone takes that way, it must not be interrupted because it leads towards business stability or more precisely, the stability for customers. It should always be a part of management business policy that the customers are actually 'generators' of the company distinguished market position, but also the special stimulus to management to create *memory of the future*.

Adoption and application of management principles is a prerequisite for creating a cloak of value for top management.

Changing the customers is not the goal and tendency of the top management and it must never be; they must change reality by changing their self-image and the image of the company. The target market should be viewed by the top management through the customers, by analyzing their needs, wants and demands. Choosing the right target market is a specific value, since, 'even a Rembrandt's painting could probably not be sold on a *wrong* market, not even for £50, while it could reach a price of several million Pounds on the *right* market.' The main goal is to reach satisfaction for both parties: the customers' expectations filled with value (moreover with *delight*), and a *profit* for the company. The achievement which refers to the previous attitude means fostering incentives to envisage and apply a superior offer, which will be continuously placed, the offer which is, among other things, the result of the management's specific *knowledge* as a permanent adjustment of thinking and actions confronted with the reality. The superiority is a matter of constant advancement, collecting and evaluating new ideas, when having new products in mind, but it is also about the constant advancement of the existing products. Moreover, not only the manufacturing but the trading process should *entirely* be concentrated on the *customers*, and not on the *products*, as the *subject* of sales. It means the establishment of better, more durable and productive relationships with customers. That is the purpose of existence for a company. It is a notorious fact that the *existence* of consumers can put the resources of the company into motion, show their value, and induce their transformation into useful and attractive *outputs*. Living a business life means looking *ahead* but understanding it is possible only by looking *back* (adapted from S. Kierkegaard). It is therefore essential to act in business in harmony with management principles. It is a privilege and not a sacrifice to be committed to them.

How to adapt management principles when our product is food, given the uniqueness of that product, its enormous importance for the survival of humanity but also the risk that a malfunction of that product is presented. Diseases caused by food are a significant problem in public health, present even in most developed countries.. Epidemics of foodborne diseases cause major socio-economic damages, including trade and tourism. They lead to interruption in earnings, rising unemployment and judicial proceedings. Food spoilage has expensive consequences and reduces the confidence of

consumers who expect the food to be safe and good quality. Also, in recent decades, international trade in food is rapidly developing which contribute to economic progress and many positive changes in social mores but also facilitates the spread of foodborne illness. Therefore, food safety is increasingly becoming an international problem. Today, developed countries are developing comprehensive, long-term and scientifically based strategy for better protection of market and health consumers from foodborne illness. For these reasons, a modern, modified food safety system started developing, in which the main focus is on hygiene and prevention of production processes. In addition, emphasis is placed on the "prediction" where and what problems may occur along the entire food chain, and the optimization of hygienic practice and related control measures on the most important points in the chain - to prevent those possible problems. This modernized approach is supported by all relevant scientific and regulatory factors on the international level, and then transformed in to the new legislation in all developed countries

### **MANAGEMENT PRINCIPLES FOR FOOD**

In the European Union (EU), the key principles of new laws and regulations on food safety include: a) longitudinal and integrated approach to food safety (from farm to fork "); b) the use of the precautionary principle (" precautionary "), c) main responsibility for food safety are company / enterprises that operate food and d) implementation of the traceability of animals, materials and products through all stages of production, processing, distribution and transport; e) transparency through public consultation and information; f) of all new regulations and appropriate measures should be that are based on risk analysis, except for exceptions where it is not applicable. For this reason, within the European Union food safety system based on HACCP is applied, and implementation is required in other ("third") countries wishing to export food to the EU market. These general principles are accepted in our country, and became a legal obligation upon the entry into force of the Law on Food Safety (Official Gazette RS 041/2009), for which the implementation deadline is set for 11 June 2011. It is now clear that many companies, particularly in the retail food will not be HACCP certified before this deadline, so further measures from ministries and governments are expected.

### **HACCP (Hazard Analysis Critical Control Point)**

The application of the HACCP principles is widespread in the developed world, while in the EU is legally binding (Council Directive 93/43/EEC, replaced the 29th 04.2004 regulation 852/2004/EC). HACCP stands for - Hazard Analysis Critical Control Point, HACCP is a system that includes a range of procedures for quality control and sensitive points in the food chain, with the ultimate goal of consumer foods used in the state and in a way that will be safe for his health. Today, food safety laboratory testing of products during the production and / or transactions with the main objective is to verify whether the whole system work effectively, rather than the test - by itself - are the main form of control.

Application of the HACCP system is not possible without satisfying the principles of good Manufacturer's Practice (GMP) and Good Hygiene Practices (GHP). GMP / GHP are the prerequisite programs that ensure compliance with general hygiene principles and appropriate procedures and organization in all matters related to food. Prerequisite programs make up a set of procedures to achieve the basic conditions and business environment, which are necessary to obtain safe products (food). The main components of the prerequisite program are Good Manufacturing Practice (GMP), Good Hygiene Practice (GHP) and Standard Operating Procedures (SOP). All components of the prerequisite program should be established and successfully implemented before the development and application of the HACCP system, they are fundamental even for beginning of preparation for HACCP. It is important to understand that the prerequisite programs include universal principles that apply in the same manner by all entities that produce and food business operators - GMP / GHP are not specific to the individual producers of the same type (eg, slaughterhouse). In contrast, the HACCP plan and the process-product-are specific.

Good Manufacturing Practice is a set of recommendations that it is desirable to implement in production, processing, storing and supplying food to prevent its microbiological, chemical or physical contamination. In other words, Good Manufacturing Practice suggests what needs to be done to prevent contamination of food, and when and who should carry out. Good Manufacturing Practice does not apply to certain (specific) harmful agents (risk) and loss of control

over the GMP will not always and inevitably, directly threaten the health of consumers, but will increase the risk.

In the framework of Good Manufacturing Practice, cleaning and hygiene are of special importance and are considered as key elements of Good Hygiene Practice. GHP can be described as a set of operations that provides a clean, sanitary environment for the production, processing, storage and supply of foodstuffs. In other words, Good Hygiene Practice determines what needs to be done in conjunction with cleaning and hygiene, as well as when and who should carry out such tasks. Areas covered by the program of Good Hygiene Practice are: cleaning the facility / facilities and equipment, health and purity of the personnel performing tasks related to food, purity of raw materials for production, including live animals, ensuring that all hygiene items and other chemicals are properly packaged, marked, stored and applied according to its purpose and documented procedures.

HACCP system consists of two basic components: HA - a risk analysis and hazard identification at every stage of food production and evaluation of significance of the threat to human health and the CCP (Critical Control Point) - are the stages in the production of which can be controlled, prevent or eliminate the risk to food safety, or their influence reduced to an acceptable level.

HACCP applies to all stages of food processing on the road:

- Production, processing and packaging
- Storage, transport and distribution
- Preparation and distribution of food - for hospitals, hotels, restaurants, airlines and other companies
- Retail and catering

HACCP is a very cost effective because it prevents the occurrence of incidents and costs of unnecessary waste. The advantages of application are numerous: in addition to increasing bezbednosti food and meet regulatory requirements, provides effective and efficient operation of enterprises, increasing competitiveness, removing barriers to international trade, allows efficient introduction of new technologies and ultimately increases customer satisfaction and consequently more profitable. Also, the HACCP system protects manufacturers from the possibility of negative publicity. Consumer claims, both justified and unjustified,

can easily be disproved using the effective program for food safety, fully documented in the form of a well-maintained HACCP records.

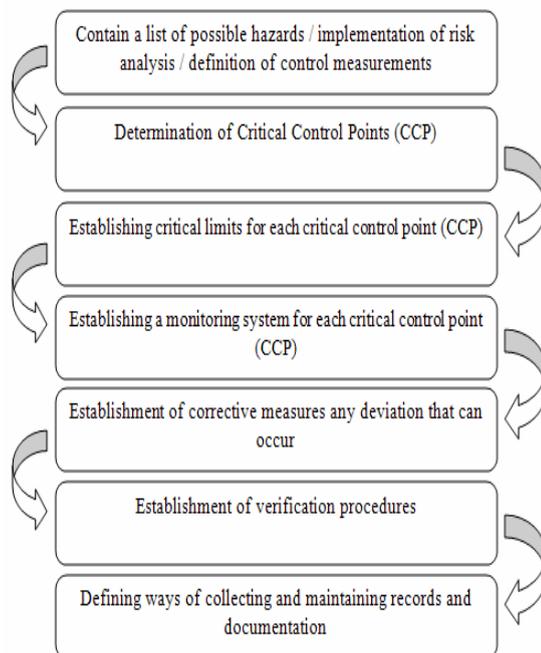


Figure 1. The seven principles of HACCP implementation

### **ISO 22000:2005 - Food Safety Management Systems**

A further step in the management of food quality is the implementation of ISO 22000 *Food Safety Management System - requirements for any organization in the food chain* (ISO 22000:2005, SRPS ISO 22000:2007, endorsed by the Institute for Standardization of Serbia 13.03.2007). ISO 22000:2005 is the first international standard for food safety (Food Safety Management Systems) endorsed by the International Organization for Standardization (ISO) and many European countries have already replaced HACCP with this standard. ISO 22000 standard applies to all organizations in the food chain and defines the requirements of food safety management system. Standard aims to improve food safety, thus ensuring the protection of consumers. In this way it strengthens the confidence of consumers and increase profitability in the supply chain of food industry. ISO 22000

is consistent with the principles of HACCP system and it provides the international harmonization of HACCP implementation. In addition, the ISO 22000 international standards harmonize is optional. The structure of ISO 22000:2005 supports compliant with ISO 9001:2008. ISO 22000 incorporates the requirements of GMP / GHP or prerequisite programs, requirements for the HACCP principles of Codex Alimentarius, and request of management system. In addition to integrating with HACCP and ISO 9001, it deals with predictions and analysis of a large number of external factors and risks, that can not only jeopardize the safety of food, but can negatively affect the production process, finances and employees.

ISO 22000:2005 is applicable to all organizations regardless of their size and their impact on the food industry. Standard is designed to serve not only the needs of food producers and processors, but virtually all organizations that are part of the food industry. In virtually all organizations involved in food production ISO 22000 standard can be implemented. These include: the primary food producers, manufacturers of components of food, food manufacturers, food vendors, restaurants, manufacturers of finished food products, organizations that perform cleaning and sanitation, freight forwarders, storage, distributors and so on.

ISO 22000 standard can be implemented in organizations that do not produce food such as equipment manufacturers, manufacturers of packaging materials, ingredients and additives manufacturers and organizations that produce other elements that are in contact with food.

Food safety management system requires organizations to:

1. Define the areas of food safety management system,
2. Documented food safety management system,
3. Develop internal and external communication with relevant and interested parties related to food security,
4. Develop a system for food security that will enable the identification and control of all risks related to food security
5. Establish procedures for potential emergencies that may affect food safety.

Food safety management system in addition to being credible, as consumers and all stakeholders, allows the company to maintain compliance with the requirements of the customer.

While HACCP is an obligation for all those involved in food production, application of standards is voluntary in practice. According to data in the Register of certified companies Serbian Chamber of Commerce, ([www.pks.rs](http://www.pks.rs), accessed the 27.02.2011), in Serbia 28 companies has been certified according to ISO 22000, while the current HACCP certification has 361 company. The reason for this is an initial cost for introduction of the standard but also insufficient knowledge of the benefits that the standard brings, as well as management quality of the company in general.

### **Codex Alimentarius**

When we talk about food quality management we must take closer look at the Codex Alimentarius, which causes so many controversies today. Codex Alimentarius Commission, CAC, a specialized international organization for food that in 1961. was jointly established by the United Nations Food and Agriculture (Food and Agriculture Organization of the United Nations, FAO) and WHO (World Health Organization, WHO) with the main aim of adopting standards and related documents (manuals, codes of good practice, references, etc..) to protect the health of consumers and ensure fair practices in food trade<sup>150</sup>. Codex members may be any member of the United Nations and associate members of FAO and the WHO. Codex currently consists of 184 member countries and the European Union. Republic of Serbia is a member of Codex since 2006., and the former SFRJ was a member of the Codex from the first session, held in 1963.<sup>151</sup>

The main bodies of the Codex are Secretariat and Executive Committee (CCEXEC), a subsidiary bodies are committees of the general subject (such as the Committee on general principles, food labeling, methods of analysis and sampling, pesticides, additives, inspection and certification systems, etc.. ), Committees for specific foods (fats and oils, fresh and processed fruits and vegetables, natural mineral water, cocoa, chocolate, sugar, meat hygiene, etc.), ad hoc intergovernmental working group (currently active working groups

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<sup>150</sup> Programme Codex Alimentarius Commission launched the official website [http://www.codexalimentarius.net/web/index\\_en.jsp](http://www.codexalimentarius.net/web/index_en.jsp) (02/27/2011)

<sup>151</sup> Prema podacima preuzetim sa zvaničnog sajta Instituta za Standardizaciju Srbije, 27.02.2011

dealing with resistance antimicrobial substances) and the FAO / WHO Coordinating Committees (Europe, Africa, Asia, ..).

Codex established continuous cooperation with the Member State through national institutions and organizations so. Codex contact point (Codex Contact Point, CCP). Codex contact point is normally located in the ministry of health, agriculture, national organization for standardization or other institutions, as decided by a Member State government. The role of Codex contact point "in the Republic of Serbia has entrusted the Institute for Standardization of Serbia.

Procedures for the preparation of Codex standards are well defined and transparent so that the standards are made in a democratic way, respecting the reasoned objections and requests Member States. Development of standards and related documents include the following activities:

- Proposals on the Member States or Codex Committee for drafting the new standards;

- the decision of the Commission of Codex Alimentarius Commission or its Executive Committee (CCEXEC) to standard and making decisions on the selection and education (the revival) of extra body, which will continue to be responsible for managing the development of standards;

- the preparation of the draft standard and its submission to the governments of member states for consideration (consultation);

- the consideration of objections to the proposed draft standard, review the draft and present text of the draft standards to the Commission;

- on which the Commission adopted a draft standard, it is sent to governments of member states to vote through the multiple procedure consisting of five or eight stages ("steps") after the standard becomes adopted Codex standards, standards for most it takes several years to be published;

Adopted Codex standards and related documents are included in the collection of Codex standards and related documents, so called "Codex Alimentarius" (literal translation of the Latin name of this collection is the "Food Act"). Currently Codex Alimentarius, among other documents, are: 204 standard, 51 Code of practice and 60 instructions, all Codex documents are available for free use and can be downloaded from the official website of the Commission. We note

that the adoption of standard procedures is very similar to the process of adopting standards under the International Organization for Standardization (International Standardization Organization, ISO).

Codex brings together the two types of standards: General Codex standards (Codex General Standards) which apply to all food and Codex standards for specific products (Codex Commodity Standards) which are prepared for all major food products, whether processed, semi-or raw (eg. for natural mineral water, rice, chocolate, salt, mango, peanut, butter, fermented milk products, etc.). declaration (the reference to the Codex General Standard for labeling packaged products, CODEX STAN 1-1985). In addition to Codex standards and related documents adopted or guidelines, codes of good practice and recommendations (Recommended International Code of Practice). An example of such a related document is "CAC / RCP 1-1969, Rev.. 4-2003, recommended by international rules of good hygiene practice - General principles of food hygiene which include a system of hazard analysis and critical control point (HACCP).

The application of Codex standards and related documents is not required, and published documents Codex member countries serve as the documentary basis for making national regulations for food safety and / or establishment of a national system for food control . In the former country, Yugoslavia, Codex standards and related documents were used in part as a documentary basis for the development of technical regulations on quality and food safety issues, as well as some national standards. National legislation of the Republic of Serbia is currently rapidly adjusted to the EU regulations. Bearing in mind that the EU in the preparation of regulations and directives in the field of food safety and quality to some degree based on Codex documents, it could be said that currently there is an indirect harmonization of technical regulations of the Republic of Serbia with the Codex documents.

We can conclude that the Codex is an international forum of scientists, experts, representatives of governmental bodies of the Member States, industry representatives and consumer organizations, who gathered at the common task of developing Codex standards and related documents intended for consumer protection. At the same time we are faced with a number of media attacks on the Codex Alimentarius Commission, where as the most critical point of the standards referred to issues of legalization of genetically modified

foods (GMOs or organisms), the use of growth hormones and antibiotics in livestock, but also limit the use of herbal and vitamins as supplements and defining them as drugs with the necessity of proving efficiency, in addition to safety and quality. Opponents argue that the Codex represents a long hand of the pharmaceutical industry, as well as major producers of genetically modified seeds and genetically modified foods in general, while some go up to the fact that the Codex Alimentarius standards are an extension of Nazi genocide and desire to survive in the world only the rich and privileged. In my research I found little or no scientific basis for such claims.

No doubt controversial, and as a consumer I am most concerned about the points that relate to genetically modified food. According to current legislation in our country GMO is completely banned, The new law on food safety (Official Gazette 041/2009), in Article 62 stands: the ministry in charge of health shall keep records of licenses issued for the marketing of novel foods or genetically modified food and genetically modified feed, in accordance with its competence. In Art. 63 of the Law also says, the marketing of GM food and GM feed, including the amount of bulk, operators such food or feed is required to an entity that receives the food supply in writing the following information : 1) it is a GM food and GM feed, 2) a unique identification mark in accordance with international standards. Genetically modified food, GM food for animals and a new food that is marketed must be on the label, in addition to the general requirements for labeling and marking of articles. 30 of this law, to reveal additional information about those properties .... . Does this represents the introduction of GMOs through the back door into the legislation of our country, we can only see in the future. Recall the case of detection of genetically modified soybean crops, which were destroyed by burning, but it remains controversial whether and how these plants found their way to the consumer table.

## **CONCLUSION**

The introduction of and compliance with the standards in food industry, followed by continuous education to food producers, processing industry and consumers as end users, is not only desirable but necessary. The introduction of HACCP principles as a means of providing food security can be a starting point, but real progress can be achieved only by implementing the sum of standards and

recommendations relating to the origin, method of cultivation, processing method, nutritional value, labeling, storage and distribution that only together can provide quality food on our tables. Management principles that have been described here create logistics that should be used as a foundation for building quite suitable, and that means efficient and effective, i.e. *optimal* strategy for the top management. Only the optimal strategy can contribute achieving and sustainability of superior performances, and in that way gaining the competitive advantage. That is its *essential goal*. The implementation of management principles is a prerequisite of successful profitable business, the *feedback* of value, which contributes to sustainability of developing thoughtful pro-action on the market as well as achieving the primary cause – satisfying consumer.

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## **RISK MANAGEMENT AND INVESTMENTS IN THE PRODUCTION OF GENETICALLY MODIFIED FOOD**

### **Abstract**

*Genetically modified (GM) plants are produced on a considerable acreage since 1996. When genetically modified organisms (GMO) are in question, the consequences of inadequate risk management and unfit control are clearly visible based on multiple number of incidents (contaminations, illegal inductions and negative side effects to agriculture manufacturing) in the world. The paper concludes that it is necessary to improve risk control techniques relating to production, marketing and transportation of GMOs.*

**Key words:** *GM food, management, risk, incidents*

### **1. INTRODUCTION**

Bio-technological processes, such as fermentation, are applied for millenniums, and microorganisms are used in the production of antibiotics, penicillin (fungus *Penicillium*), or streptomycin (bacteria *Streptomyces*) for decades. Modern detergents, cheeses and human insulin are produced by the means of bio-technology. Bio-technology is used in agricultural production, in the selection processes for high and stable crops, for the increase of resistance to diseases, pests and abiotic stress (frost and drought) and for the increase of food nutrients. Besides, it is used in the production of disease-free seedlings (cassava, banana and potato); as a new diagnostic tool; for preservation of genetic resources; for vaccine production. Today's crops, trees, livestock and fish, which are often radically different from their ancestors, are produced by exploitation of natural varieties of biological organisms. Today, when we talk about bio-technology we often think of the recombinant DNA technology, known as genetic engineering (GE) or GM. GE stands for all genomic modifications of an organism by the means of transgenesis, where DNA is transferred from one organism or cell to the other without sexual reproduction. No matter if it is applied to prokaryotes, plants or animals, the basic techniques are very similar, and almost always

include the installation of the desired DNA fragments into bacterial plasmid by means of restriction endonucleases and DNA ligase. The fragment (gene) that is to be incorporated into a genome of the target organism is prepared, analysed and reproduced using plasmids in a bacteria *Escherichia coli*. Depending on the organism (bacteria, plant or animal), the methods for implementing the desired gene into the genome are different. The land bacteria *Agrobacterium tumefaciens* is commonly used in plants for this purpose. Until now, the following GM crops are approved for use in various applications (for human and/or livestock nutrition; industrial use) in various countries of the world – common sundew, sugar beet, oilseed rape, field mustard, papaya, chicory, melon, pumpkin, carnation, soybeans, cotton, sunflower, lentil, flax, tomato, alfalfa, tobacco, rice, potatoes, wheat, corn, poplar, and pepper. The most presented transgene plant varieties in production are those whose genome is altered by insertion of genetic constructions for resistance to wide-range non-selective herbicides and resistance to insects. The plants resistant to viruses are less common, the ones with delayed seed maturation period, changed oil composition or controlled fertilization [1].

GM plant production for commercial purposes is present on all continents, but the areal of their diffusion is different in all countries. Global acreages under GM crops in the last 14 years amount to 950 millions ha in the world. Last year's 134 million ha increased for 79 times when compared to 1.7 million ha in 1996 and this shows that the Genetic revolution undoubtedly presents the fastest adopted plant technology in the modern human history [2].

**Table 1**  
**Global acreages under GM crops, between 1996 and 2009, by**  
**countries (milion hectares)**

Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
SAD	1,5	8,1	20,5	28,7	30,3	35,7	39,0	42,8	47,6	49,8	54,6	57,7	62,5	64,0
Argentina	0,1	1,4	4,3	6,7	10,0	11,8	13,5	13,9	16,2	17,1	18,0	19,1	21,0	21,3
Brazil	--	--	--	--	--	--	--	3,0	5,0	9,4	11,5	15,0	15,8	21,4
Canada	0,1	1,3	2,8	4,0	3,0	3,2	3,5	4,4	5,4	5,8	6,1	7,0	7,6	8,2
China	--	0,0	<0,1	0,3	0,5	1,5	2,1	2,8	3,7	3,3	3,5	3,8	3,8	3,7
Paraguay	--	--	--	--	--	--	--	--	1,2	1,8	2,0	2,6	2,7	2,2
India	--	--	--	--	--	--	<0,1	0,1	0,5	1,3	3,8	6,2	7,6	8,4
South Africa	--	--	<0,1	0,1	0,2	0,2	0,3	0,4	0,5	0,5	1,4	1,8	1,8	2,1
Uruguay	--	--	--	--	<0,1	<0,1	<0,1	0,1	0,3	0,3	0,4	0,5	0,7	0,8
Bolivia	--	--	--	--	--	--	--	--	--	--	--	--	0,6	0,8
Australia	<0,1	0,1	0,1	0,1	0,2	0,2	0,1	0,1	0,2	0,3	0,2	0,1	0,2	0,2
Mexico	<0,1	<0,1	0,1	<0,1	<0,1	<0,1	<0,1	<0,1	0,1	0,1	0,1	0,1	0,1	0,1
Romania	--	--	--	<0,1	<0,1	<0,1	<0,1	<0,1	0,1	0,1	0,1	<0,1	<0,1	<0,1
Philippines	--	--	--	--	--	--	--	<0,1	0,1	0,1	0,2	0,3	0,4	0,5
Spain	--	--	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	0,1	0,1	0,1	0,1	0,1	0,1
Columbia	--	--	--	--	--	--	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1
Iran	--	--	--	--	--	--	--	--	--	<0,1	<0,1	--	--	--
Honduras	--	--	--	--	--	--	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1
Portugal	--	--	--	<0,1	--	--	--	--	--	<0,1	<0,1	<0,1	<0,1	<0,1
Germany	--	--	--	--	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	--
France	--	--	<0,1	<0,1	<0,1	--	--	--	--	<0,1	<0,1	<0,1	--	--
The Czech Republic	--	--	--	<0,1	--	--	--	--	--	<0,1	<0,1	<0,1	<0,1	<0,1
Bulgaria	--	--	--	--	<0,1	<0,1	<0,1	<0,1	--	--	--	--	--	--
Indonesia	--	--	--	--	--	<0,1	<0,1	<0,1	--	--	--	--	--	--
Ukraine	--	--	--	<0,1	--	--	--	--	--	--	--	--	--	--
Slovakia	--	--	--	--	--	--	--	--	--	--	<0,1	<0,1	<0,1	<0,1
Poland	--	--	--	--	--	--	--	--	--	--	--	<0,1	<0,1	<0,1
Chile	--	--	--	--	--	--	--	--	--	--	--	<0,1	<0,1	<0,1
Burkina Faso	--	--	--	--	--	--	--	--	--	--	--	--	<0,1	0,1
Egypt	--	--	--	--	--	--	--	--	--	--	--	--	<0,1	<0,1
Costarica	--	--	--	--	--	--	--	--	--	--	--	--	--	<0,1
Total	1,7	11,0	27,8	39,9	44,2	52,6	58,7	67,7	81,0	90,0	102,0	114,3	125,0	134,0

Source: [3, 4, 5, 6]

During the second year of cultivation, the land under GM crops rose by almost 5.5 times when compared to the first year. In the third year, when compared to the second, the increase was 150%. In the fourth year, when compared to the third, the increase was around 40%. In the fifth, crucial year of cultivation (2000), the increase of only 10% was registered, which was caused by the introduction of the EU moratorium on imports of transgenic plants, which affected the planting plans of American farmers. Then, in the following years, the growing trend of 19%, 11%, 15%, 20%, 11%, 13% and 12% was recorded in 2007 when compared to 2006. The lowest growth rate was recorded in 2008 (9.3%) and 2009 (7.2%), probably due to record-high price of GM seed and technology taxes.

The share of the United States, Argentina and Canada, pioneers and leaders in the production of GM crops, in the total acreage has gradually decreased over the past fourteen years of cultivation, along with increased participation of other countries (Table 1). After 13 years Brazil has replaced Argentina at the second manufacturing position. Now, this country produces 16% of total biotech crops. India has become the largest exporter of cotton and the second largest producer of cotton in the world. There has been a shift in the diffusion of this technology on the African continent when Burkina Faso and Egypt joined production in 2008. Five largest GM developing countries, Brazil, Argentina, India, China and South Africa, enjoy strong political support of their governments, which provide them favourable legislation and financial support. This policy has resulted in a 46% share of developing countries in global GM acreages.

## **2. EU RELATION TO GENETICALLY MODIFIED FOOD**

When compared to the American approach to GM food, which relies on the principle of essential equivalency, where transgene plant strings and their products are not essentially different from strains generated by conventional crop improvement methods, and therefore they do not need special precautions for production and usage, the EU method is based on the application of preventive principle. According to this conception, the application of transgene plants in practice is conditioned by previous examination of possible bad effects. At the same time, risk size and potential benefits from cultivation and usage

of GM plants are on the other hand taken into consideration. In the history of technology and techniques, there is no other example of such thorough examinations which are based on plants. Besides “strict” regulations, public resistance to this technology is expressed in the EU. Even after abolition of the moratorium (1999-2004) for transgene plants, i.e. abolition of import prohibition of US GM products (seed, foodstuffs, fodder) to the EU and repeated implementation of European countries to the production, the diffusion of new technology is done contrary to the trends in previously mentioned parts of the world. It is very difficult to find GM food at EU market. Maize and potato are the only GM crops which are commercially produced in the EU. Permission for maize production was issued in 2004, and renewed this year for MON863, NK603 i MON810 (import and processing, the usage for people and livestock nutrition). The production on the area of 110.000 ha has been reduced to the last year’s 95.000 ha due to cultivation ban in France and Germany. GM maize is mainly used for livestock nutrition and as raw material in starchy industry, and less in food production (cereal, popcorns, oil). In March this year, GM Amfora potato rising (BASF Company) is approved for the first time (industrial processing). This kind of potato will not be used for people diet, but its by-products are used as fodder. Every year, the EU imports about 40 million tons of raw soya bean plant from Brazil, the USA and Argentina, which is mostly used for livestock nutrition. To a smaller extent, soya bean is used for oil production or food ingredients and additives (e.g. lecithin is used as emulsification in the production of chocolate, ice cream, margarine and baked goods). At the EU market, you can not find GM rice, oilseed rape, cotton, nor fruit and vegetables [7].

### **3. RISK ANALYSIS IN THE PRODUCTION AND MARKETING OF GM FOOD**

Risk is an integral part of everyday life. It is involved in all activities. Agriculture, in all its forms, presents a risk for farmers, consumers and the environment. Risk analysis consists of three steps: risk assessment, risk management and risk communication. Risk assessment includes evaluation and comparison of the scientific evidence in relation to the risk associated with alternative activities. Risk management involves the definition of compulsory measures of supervision and risk management in order to prevent and control risks

within acceptable limit. It depends on risk assessment and social and economic factors. Risk communication is a dialogue between authorized bodies and the public about the risk and its control options for making appropriate decisions. Risk is often defined as “probability of harm”. In contrast, the hazard is everything that can obviously end badly, so the hazard itself does not contain the risk. While estimating risk, there are the following three questions that should be answered: 1) What may go wrong?; 2) When it will probably happen?; 3) What are the consequences? The risk always depends on the three elements of the equation: Risk = hazard x probability x consequences. Seemingly simple concept of risk assessment is actually very complex and relies on scientific thinking and reasoning skills. Risk may be underestimated if hazards are not identified and properly characterized, if the probability of hazard is greater than expected or if the consequences of hazard are higher than expected.

Probability and hazard in part depends on strategy of control risk. In everyday life, risk has different meanings to different people, depending on their social, cultural and economic background. People who are barely surviving may be receptive to accepting a greater risk than people who have a comfortable life, if they believe that this will provide them a chance for a better life. Risk often has different meaning for one person, at different times, depending on the specific issues and specific situation. People prefer to accept the risk associated with well-known and freely chosen activities. While estimating risk, one should always think about the following issues: 1) Who bears the risk, and who makes profit? 2) Who estimates damage? 3) Who decided that the risk is acceptable?

At the 26th session of the Codex Alimentarius Commission in 2003, the following documents were adopted: The Principles for the Risk Analysis of Foods Derived from Modern Biotechnology [8], the Guideline for the conduct of food safety assessment of foods derived from recombinant DNA plants [9] and the Guideline for the conduct of food safety assessment of foods derived from recombinant DNA microorganisms [10].

According to the Principles for Foods Derived from Modern Biotechnology (including principles of risk assessment, risk management and communication about risk), risk assessment includes the risk analysis that is issued based on the presence of hazard, food products and other problems, and (if any) information about their

nature and severity. This approach reflects the concept of essential equivalence, through evaluation of safety. Security assessment should: a) define intentional and unintentional effects, b) identify new or altered hazards; c) identify changes in key nutrients important to human health. It should be conducted for each case individually. Risk management measures should be proportionate to the risk, and according to the general decision of the Codex Commission and the Codex working principles for risk analysis, they should take into account other relevant “legitimate measures” [11]. Managers need to identify problems in order to manage them. Risk management measures may include labeling food, defining the conditions for market approval, post-market monitoring, development of methods for detection and identification of food created by modern biotechnology, and product traceability. The principle of risk communication is based on the assumption that effective communication is essential in all phases of risk assessment and management. The communication should be interactive, transparent, documented and open for the public, while respecting the legitimate right to confidentiality of commercial information (the Report about Risk Analysis should also be available to the public). Besides, in the Principle for the Risk Analysis of Foods Derived from Modern Biotechnology, it is stated that methods for risk analysis of chemical substances such as pesticide residues, contaminants, food additives and manufactured products, are hard to apply to non-processed food.

The guideline for the assessment of food safety generated from recombinant DNA plants that supports the previous Principle, describes (recommended) approach for assessing food safety generated from recombinant DNA plants when there is a conventional counterpart. The conventional counterpart is defined as “similar plant variety, its components and/or products are considered to be safe, based on experience, i.e. standard use (as food)”. The guideline explains the difference between the risk assessment of recombinant DNA plants and their conventional counterparts, emphasising that substantial equivalence does not *per se* mean security assessment, but rather a starting point for evaluation. Essential equivalence is used to identify similarities and differences of new food and its conventional counterparts, in order to assess the safety of identified differences by the means of subsequent safety evaluation, taking into account the

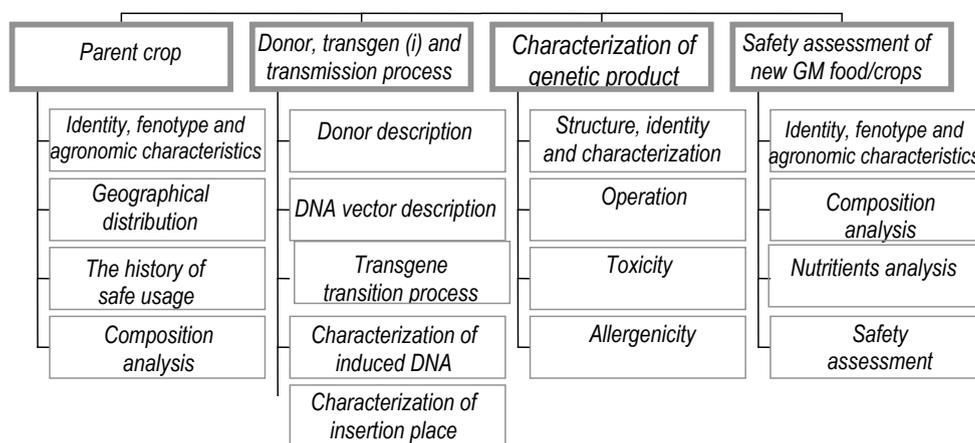
unintentional effects of GM, which is the responsibility of risk managers in the next phase.

The guideline for the assessment of food safety created using recombinant DNA microorganisms is also supported by the principle, giving the access to the assessment of food safety generated from recombinant DNA microorganisms. In this case, the comparison between the recombinant DNA microorganisms and conventional counterparts (microorganisms) is not recommended, but between the produced and original food.

These documents suggest that health safety analysis of GM food should be done by the means of traditional counterparts, focusing on similarities and differences. The concept of comparison with a conventional counterpart is the basis for risk assessment of new foods and food ingredients in many countries (the EU, the USA, and Canada). If it is assumed that there are reasons for concern, it is necessary to characterize the risk in order to determine its impact on human health. The process begins with the description of organism and donor and GM characterization. The next security assessment takes into account factors such as toxicity, potential for causing allergic reactions, the outcome of composition changes of key nutrients and metabolites, stability of inserted gene and food modification combined with GM (figure 1).

Security estimation of GM fodder (crops, their products and enzymes) in Canada, the USA and other states is carried out by the means of comparison between molecular, compositional, toxic and diet characteristics when compared to conventional characteristics of their counterparts. Among other things, effects on animal nutrition and consumers who use livestock fed on GM are considered. The main subject of investigation is the possibility for the modified plant DNA contained in fodder to enter the food chain with possible adverse consequences, as well as the possibility for creation of bacterium potentially pathogenic to humans and resistant to antibiotics.

*Figure 1. Integral approach to the assessment of new GM food safety*



Source: [12]

#### 4. CONSEQUENCES OF INADEQUATE RISK MANAGEMENT

Despite the adopted, above mentioned, Principles of the Codex Alimentarius, the consequences of inadequate risk management and poor control, when it comes to GMO, are clearly visible on numerous incidents in the world. The following are considered to be incidents: contaminations, illegal introduction and negative side-effects on agricultural production. Contamination is unintentional presence of GM material from GM crops and other organisms in food, fedder or related wild species, as shown by adequate laboratory tests. Illegal cultivation or introduction is every cultivation, release into the environment or into the food chain of GMOs that are not approved by the laws and regulations. Negative side effects on agricultural production are those effects for which it is scientifically proven to be negative. In the period between 1996 and 2005, 113 GMO incidents were recorded in the world: 88 contaminations, 17 cases of illegal GMO release and 8 negative effects, in 39 countries on five continents (Table 1)<sup>152</sup>.

<sup>152</sup> These numbers are not exactly correct because specific GMO as contaminants can occur a couple of times, but documented as a single case (e.g. Syngenta illegal Bt 10 corn was found in 11 supplies in Japan, but it was documented as only one incident).

The major participants in the incidents were the USA (19) and the UK (10). In 2005, 18 incidents were recorded in 11 countries and Europe (Europe is specially separated because the entry point of Bt 10 maize is not known): the United States (2), Australia (4), Brazil (1), Germany (1), New Zealand (1), Japan (1), Romania (3), India (1), Ireland (1), China (1), Serbia (1) and Europe (1).

Over 90% of incidents are connected to 4 main commercial GM crops: maize (35%), soya beans (23%), oilseed rape (18%) and cotton (9%). The other incidents (except papaya that is grown only in Hawaii) are conditioned by illegal introduction (grass, plum, potato, rice), GM crops contamination which are used in field experiments (sugar beet), improper identification, low quality control and improper lab analysis (tomato, squash, GM pigs).

In the total number of contaminations, food intended for people nutrition participated with 36% and fodder with 7%. These contaminations are caused by allogamy (in field) or mixing with non-GM varieties after the harvest. There were 7 cases of food contamination, which were delivered to Central and South America, Bolivia (2), Colombia (1), Guatemala (1), Nicaragua (1), Peru (1) and Ecuador (1). Seeds contamination (51% of cases), mainly imported from North America, has caused allogamy and poor quality control. Contamination of natural varieties in Mexico, wild relatives in Canada (transferred gene for herbicide resistance from *Brassica napus* to wild *Brassica rapa*) and neighboring crops in Germany (Novartis GM corn contaminated conventional crops) was created by allogamy [13]. Uljana repica u Japanu, gajena na lokalitetima blizu luka je kontaminirana usled rasipanja GMO [14]. Oilseed rape in Japan grown at sites near the port had been contaminated due to the scattering of GMOs [14]. There has been one contamination incident of soya bean in the U.S. intended for human nutrition with ProdiGene's GM corn (used for the production of vaccines for pigs) which was previously grown on the same site [15].

Illegal introduction of GMOs, which was documented in 17 cases in India, Brazil and Romania, was caused by irregular state or international control of experimental and commercial GMO production. Unauthorized experiments (7 cases) were conducted on plums and potatoes in Romania (3), herbs in the U.S., papaya in Thailand and Taiwan and rice in China [16, 17, 18, 19, 20, 21]. This

group belongs to field trial on maize tolerant to herbicides that AgrEvo (now Bayer CropScience) conducted in Croatia in 1997 before the adoption of the regulation. Uncontrolled trade with GM seeds caused illegal GM crops cultivation in four cases: 1) GM soya beans grown in Romania on considerable acreages in 2005; 2) GM Monsanto cotton was grown in India in 2001 at 10,000 ha; 3) GM soya beans were produced in Brazil during late 90s; 4) GM soya beans were grown on 430 ha in Serbia in 2005 [22, 23, 24]. Sometimes the reasons for illegal introduction are not clear, but it seems that the human factor is dominant. The import of squash seed (Judgement III variety resistant to viruses) in Germany happened in this way due to an error in labeling, and four-year breeding of Bt10 maize in the United States and its export to Ireland, continental Europe and Japan happened due to poor quality control [24]. Negative side effects on agricultural production appeared in eight cases, among others: 1) in 1998 in Canada, three years after the first cultivation of GM oilseed rape tolerant to herbicides, wild oilseed rape, developed resistance to three herbicides (Liberty, Roundup and Clearfield) [25]; 2) in 2005 in the United States after Roundup Ready soybeans growing and increased use of glyphosate, weeds resistant to the herbicide were noticed [26]; 3) in 2005 in Australia and India, *Heliothis zea* Bod. developed resistance to Bt Cry1Ac toxin in GM cotton [27].

In September 2000, The Taco Bell (fast food chain), Kraft Foods (corn supplier), Mission Foods (manufacturer of tortillas for Mexican food) and Kroger Co. manufacturers, Food Lion, Shaw's Supermarkets, Albertson's, Azteca corn, had found StarLink maize ingredients in food, which was only approved for livestock nutrition (because it causes allergic reactions in humans). USDA and the Aventis Company (the creator) withdrawn more than 300 products from the market, and Aventis and other companies (AgriPro Seeds, Inc.; Bo-Jac Seed Co.; Cenex/Croplan Genetics; Curry Seed Co.; Fred Gutwein & Sons, Inc.; Garst; Hoegemeyer Hybrids, Inc.; Legend Seeds, Inc.; NC + Hybrids, and Sieben Hybrids) stopped seeds selling. This action significantly reduced the possibility of contamination, but did not guarantee the complete elimination, because the harvest had been already finished, and Starlink was mixed with other strains of maize, so American consumers probably consumed maize with 0.5-0.6% ingredients of StarLink. The problem was increased by

transferring Starlink maize to other countries: Canada, Japan, Korea, Egypt, Bolivia and Nicaragua [28]. The company Aventis paid US\$ 500 million to farmers, manufacturers and food processors in compensation. Bt10 corn officially does not exist (or the information is not available to the public because they belong to the category of "confidential business information"), but the corn had been inadvertently grown in the world for four years [29]. In December 2004, Syngenta reported on "the wrong identification" to the United States, i.e. detection of Bt10 maize as Bt11 (which are approved for commercial production). In the meantime, i.e. in the period between 2001 and 2004, the several hundred tonnes of Bt10 maize were grown and distributed in the U.S., Canada and other countries. It was accidentally used in field trials in Spain, Chile, Canada and Argentina, as well as in the limited part of France in 2001. The total cost for contamination remediation and genetic structure of this maize are not known so far. It is only known that in 2006 Syngenta agreed to pay compensation to the the Environmental Protection Agency USA (EPA) to the amount of US \$ 1.5 million. It was discovered in Canada in February 2004, that the admixture of GM pork (of three sows), that the company TGN Biotech modified to produce medicines for human and veterinary medicine, were found in pig and poultry feed [30]. An almost identical incident was discovered also in Canada two years before this one. Eleven pigs with a gene encoding phytase enzyme from *Escherichia coli*, known as environmentally friendly, accidentally contaminated 675 tonnes of poultry feed that was sold to egg and turkey producers [31]. After FDA notification (February 2003) that the University of Illinois in the period between April 2001 and January 2003 sold 368 pigs to livestock traders, the University pointed out that these pigs were descendants of pigs modified for increased milk production and the production of insulin factor, but that they hadn't not inherited the altered gene [32].

## 5. CONCLUSION

Based on the above, we can conclude that it is necessary to improve risk management techniques relating to production, sale and transport of GMOs. Particular attention should be paid to quality control, human resources management involved in the GMO activities and the development of identification and laboratory analysis. Control

measures on the state border crossing points must be strengthened. One way to reduce the risk of this kind is to educate staff involved in the chain of production and sale of GMOs.

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## **IMPROVEMENT OF HEALTH MANAGEMENT IN SERBIA**

### **ABSTRACT**

*The center of the health care system is all about men, throughout their lives, from conception to death, with the natural ability to take care of themselves – both when they are healthy and when they fall ill or when they need an organized and specialized help. Since a disease affects almost all men, it is one of the required priorities to think ahead. People are obliged under certain circumstances to pay for the health care services while they are healthy, and find its organized system available when they are ill. Health care for citizens of Serbia, as well as the coordinated and organized health systems, with their primary, secondary and tertiary health care should be accessible to everyone under equal conditions, the principles of scientific medicine on the one hand, and business performance of health institutions, on the other. It is a human right to use organized and efficient health care system which gives them freedom from disease, and thus creates a free society.*

**KEY WORDS:** *Management, Health Management, Transition, Privatization of the Health System, Local Health Policy.*

### **BACKGROUND**

In this paper, we examine empirically how different methods of privatization might have influenced economic growth in the first decade of 21<sup>st</sup> century, and more of transition by comparing growth performance pre- and post-privatization in groups of countries categorized according to a broad privatization method. In practice, each country used a variety of privatization methods, with the choice of methods depending on factors such as the political slant of the government, international debt, the levels of economic and institutional development, and enterprise specific factors.

## **INTRODUCTION**

### **1. Defining the research problem**

Starting from general trends of globalization and from the level reached by the initiated transition processes in our country, once again the state has been in the focus. Its institutional strengthening, which means establishing its new functions under the conditions of free market economy, should have led to the development of health care institutions, liberalization and privatization of the health system in Serbia as well as inflow of capital from international capital markets [1]. This would be applied as a result of the construction and functioning of the economic system aimed at promoting modern health institutions that provide their services in a market economy, and encourage sound competitiveness in the health system of Serbia [2]. Attracting and retaining foreign direct investment is a major goal of many countries, since it is quite obvious that they have an important role in the creation of new steady jobs, improving the quality of health services, transferring technology and knowledge on modern business operations in health system, raising competitiveness, improving the health education system and reducing poverty through general economic growth and development. Creating favorable conditions for domestic and foreign investment represents a major challenge for all countries, given that increasing globalization and the pressure to be competitive in the business framework are creating the need for constant improvement of the general business environment and performance of the Serbian health system [3]. At the macro level, it is the main role of the government to ensure stability and improve the general business environment and market pressures to be competitive, and also to require constant improvement of efficiency and greater flexibility and effectiveness of those who run businesses [4]. Business and development strategies, investment management, ownership restructuring, equity valuation, stock exchange business, credit capacity, implementation of accounting and market standards in the health business according to the EU criteria. The policy of economic reforms at the global and local level contains the following topics of analytical reviews on Health Management. General: What are the investments in the health system? What are differences between foreign and domestic direct investments? What is meant by building investment environment in health services? What are the

necessary improvements in all segments of the market operations (which emphasize the necessity of amendments to the health legislation) [5] [6].

Macroeconomic and business environment has been constantly developed over the last five years, with the government adopting a number of new laws, managing to stabilize the annual budget and reaching formal agreements with the international community on issues of debt and budget support and making significant progress in the preparation for the privatization of the Serbian health system [4].

The basic types of direct foreign investments in the health system, with the exception of traditional forms of selling (merger, acquisition, privatization), are classified as following:

- Greenfield - a health care institution aided by a foreign investment starts business operations in a completely new location ("in the wasteland").
- Brownfield - a health care institution aided by a foreign investment begins operations in a hospital or at the spot that has formerly been used for providing health services, where there are already some infrastructural assets located, the property retained from the bankruptcy proceedings that may be purchased for new investments.
- Joint ventures - a foreign company takes a significant stake in the newly established local health care institution.

Cooperation between public and private sector (Public Private Partnership) is a modification of the above definition of joint ventures, with the state and local authorities or public enterprises signing a cooperation agreement with the company from the private sector in order to formally plan, conduct and manage a particular activity or goods. It also refers to the development of financial markets in health and health care organizations, as well as a comparative analysis of the Serbia health care system in relation to particular requests connected to the accession and the association with the EU. Prospects of development of health management and the introduction of stock markets in health care and pharmacy are also involved, as well as the performance appraisals of the health policy conduct at the local level [8]. Synthesis of formal and material properties of the state of liquidity, which includes the general economic and political stability, solvency, good reputation in the business world, a high market position, the ability of accommodation and rapid adjustments to

modern trends in health care. The broader concept of the health system reform also involves introducing a procedure for evaluating the level of management capabilities of those in charge of running health care institutions, as well as the level of integration of health policy. By gaining a positive evaluation grade for the state run health care reforms, Serbia could be successfully positioned in this area, both due to its internal need for improving the level of health care and the health care service delivery in the country and in the immediate environment [9]. More transparent communication among all stakeholders in the health management system within the European Union, as well as by the implementation of international economic standards and full implementation of international auditing reforms in health care, will bring us a relatively more open position, through financial statements which can be used for getting information on the condition, quality and operations of our health care system. Preparation of methodological guidelines and expert content regarding the business policy assessment of health care system reforms at the local level would bring together experienced financial experts and analysts in the field of health management [10] [11].

### **OPERATIONAL AUDIT OF HEALTH CARE SYSTEM**

Operational audit is a comprehensive category, which is designed to analyze the organizational structure, systems of internal control, the work process flows, broader assessment of financial standing and performance results of health management. It is an instrument of business, a management tool, but also its correction measure of the achievement of a health organization compared to its purpose and stated goals [15]. Operational audit deals with the overall achievement of objectives, effectiveness of operating procedures and the internal control, with individual managers' performance and other non-financial aspects of the business. What follows the incorporating an orientation to the operational review is an effective management approach, which has a mission to accomplish goals [13].

The aim of this paper is to develop a system that would enable the achievement of the broader concept of evaluation analysis of the investment environment in the health sector both at the global and local level. The way for this assessment of the economic reform policy at the local level includes required auditing of financial statements by health institutions on the one hand, and using operational audit of

economic policy in the health institutions at the national Provincial and local levels, on the other. Operational audit would be used for reviewing the organizational structure of health care policy and comparative analysis of the situation in the health care services of the EU member states with the countries that aspire to become its members. The course of the work process through monitoring local economic policy, internal control objectives and effectiveness of business practices of health care organizations, makes the basic structure of health care system. The research would be used as a starting point for business transactions and the way of obtaining work experience in gaining knowledge about how to implement organizational activities and capacities of management in health care organizations in order to gain membership with the EU as soon as possible. The evaluation of economic and organizational reforms in the health care system is set as the main goal of the research, and it includes the synthesis of local and national attitude of the country towards the health care system [14]. Corporate governance and the internal audit of the health care system means implementing management approach in solving the tasks of risk reduction in the 3E (Economy, Efficiency and Effectiveness) of the system.

- Economy is a principle that involves minimal costs for standard quality.
- Efficiency follows the relationship between income and expenses in the health care institutions.
- Effectiveness is a principle that compares planned with the accomplished activities.

There are modern strategic controlling instruments for managing organizations. Particularity of approaches to these instruments in our country is reduced to setting a diagnosis with a specific methodology of the operational audit based on a wider assessment of creditworthiness, and the controlling instruments especially adapted for organizations in the process of reengineering their medical activities [15]. Approach to Balanced Scored Card confirms its extraordinary applicability in our environment for implementing organizational strategic goals to reach every employee in the health care sector, as well as achieving the required elements of necessary incentives on a personal level. Insisting on the implementation of the internal control, the operational auditing and

controlling as an instrument of modern health management is the starting point for creating a global assessment of health care institutions' solvency, as well as an analysis of the level at which business functions are organized within the organization, since the activity of health care institutions is reflected in the area of business functions. It is necessary to adapt the system to our specific business conditions in the health care sector so that this "revision evaluation of economic policy" could allow faster implementation of modern management concepts after the fashion of the EU model in our health care institutions, for routing the concept of permanent monitoring of their future operations. Audit assessment of the local investment health care policy would be a basis for introducing operational and strategic approach of a new concept of the Partnership for European Integration [16]. Defining and assessing quality used to be tasks performed by technology professionals and economists. Currently, the definition and evaluation of the health care systems in the EU member countries are increasingly in the domain of patients, the well-informed public and users of services, and the competitive market that compares performance with other countries. The development of technology and information, the requirements to ensure transparency and accountability, and limited financial and human resources of each member country bound by the WHO to describe and implement the reform of its health care system in accordance with international, recognized structure standards, processes, execution and results. The first part of this paper is aimed to provide the health care policy makers in the World Health Organization (WHO) member countries with basic information on common definitions and issues that refer to the quality of health systems and health care [14].

### **HEALTH MANAGEMENT IN SERBIA – THEORETICAL POSTULATES AND PRACTICAL SOLUTIONS**

Management is defined as process of creating and maintaining conditions where individuals working together in groups efficiently achieve their chosen goals. A large number of scientists and managers, through their practice, have concluded that the management analysis has been made considerably easier by efficient and clear organizing of knowledge. Therefore, it is necessary to emphasize concepts,

principles, theories and basic techniques of the health care system functioning [18] [19].

Management can be applied to every kind of organization. It is applied by managers at all organization levels. The goal of all managers is the same – to make profit, and management is related to productivity, efficiency and effectiveness [18] [19]. The essential motto of this paper is: “The better public system, the better health care system.” By using the existing concept of operations and evaluation of the economic policy, along with adjustments to our local particularities and the level of the health care system development, it is possible to provide the so called “auditing evaluation of the health care system conditions” in our country. Besides considering the current position, it will be used as a basis for timely planning and promoting the health management in Serbia [16] [17]. Research based on the suppositions in the introductory remarks and previous analysis could be carried out by applying relevant scientific methods, and by providing evidence for the following major hypotheses:

H1 - Health Management, as a basic form of demonstrating entrepreneurship in the health care system, is a necessary part of the dynamic adjustment to economic structures. By being established, by operating and entering the country's economy, development and expansion, the modern health care facilities include: the existence of a clear, market-valORIZED entrepreneurial ideas, provided financial and other support in the community, suitable organizational infrastructures that encourage entrepreneurial ideas, technical knowledge, and also the actual and accessible institutional infrastructure, as well as the stimulating economic policy of the Serbian government.

H2 - Managing development of health care facilities include: knowledge of modern diagnosis and prognosis concepts, readiness to cope with changes and risks, and also constant measuring of limits for achieving economies of scale and scope, and in accordance with this, the determination of relevant strategic options towards developing behavior. Health management is not only a reflection of claims, business philosophy and skills, but the main instrument of managing the health care policy development.

H3 - It is possible to develop an adequate strategy for overcoming the current problems of transition and inherited structural inconsistencies in the existing economic circumstances, on the basis of entrepreneurial practices and experiences of developed countries and

the EU, and also on available resources and current developments in science and society.

H4 - It is possible to establish a model of endogenous economic development, with clustering methods - based on the similarity of cases, which is an objective foundation for software reengineering and restructuring of large health care systems, and also creating structures and building health care facilities suitable for the promotion of entrepreneurship and providing conditions for entrepreneurial behavior for stakeholders in their future privatization processes [12].

Generally speaking, management involves a form of hierarchical organization in business administration and management where specialized experts are in charge as a driving force of the process of researching, planning, organizing the work process and finally selling and distributing results of this work - the goods and services. Management approach that involves teamwork in the execution of projects managed by the operational group of educated, professional and cooperative moving. Managerial approach also includes some form of team work. Such teams are led by operational groups of educated, agile and cooperative experts. The managerial approach in the team work is carried out through: knowledge, expertise, skill, creativity, cooperation, harmony, agility, and respect for hierarchy and etc., and refers to areas that include ideas, research, drafting, planning, implementation, management and analysis. A team is defined as a group of individuals with similar goals working together and individually. The managerial activity includes a modern and creative approach to redistribution of duties and obligations in all forms of organizing and managing. It is in the essence of managerial activity to create a team with compatible, cooperative, harmonious and operational approach, ready for rapid changes and adapting quickly to new situations and solving problems may occur during the implementation of the project. The concept of management is defined and treated differently in theory and practice. The meaning of the word *management* is usually interpreted as managing, leading and even as an art, skill - which is too comprehensive and general. As a part of this general meaning, it is necessary to point out everything needed, and to articulate all that is essential for that complex idea. The organization is important for doing a job or carrying out a specific task, both in preparation and in performance, which can be achieved

by dividing them into work activities. Actions are then taken after analyzing them and reaching adequate conclusions. The approach to seeking the most favorable conditions and an optimal solution should not be the one of a conformist or as a pattern, but rational and creative. Management is the process of governing or managing some venture, and its integral part is the overall development of strategies, long-term planning, regulation, coordination and control of such activities. Appropriate flow of information among and within strategic, functional and operational levels in order to facilitate timely and proper decision making is the key to successful management. Management exists in all types of organizations. It is a practical discipline, but there is also its theory. There are several definitions of management, but the most common is: Management is a set of functions aimed at efficient and effective use of resources to achieve organizational goals. The use of resources refers to utilizing human resources, materials, equipment, technology, information and more, with minimum costs and in a designed manner. Effectiveness means taking a good decision and executing it successfully. Since the goals are set to managers by their employers, because the owners are in charge of managing the company, and not managers - managers are to achieve the goals. All employees of a company are supposed to carry out all activities in order to attain goals [9]. Buyers of services, in this case patients are important because they need to be provided with the high quality goods/services.

Suppliers of health care equipment and materials are also an important factor but a constraint to the health management in Serbia as well [11]. It is the public where a health care organization creates its image. These can be regarded as main limiting factors and core components of a managerial job.

### **MANAGEMENT IN HEALTH CARE SYSTEM**

Health management refers to successfully managing a health care organization, what in the most general sense includes selecting control measures (decisions), by which influence the results achieved are better than those of an organization where these measures are not taken [10]. These measures are successful as much as they are well adapted to the goals that should be achieved in the imposed conditions. If goals are not clearly stated (or have been deviated), or when all restrictions and obstacles that come from working conditions

are not taken into consideration, then the most dearly measures may miss their purpose, and the results may be opposite to the expected. Health care system, as a specific form of service activities, includes in its organization more specific and expert activities that are mutually conditioned and compatible (medical, technical, administrative, educational...), and it expresses a particularity in its organization, administration and management. Being a complex mechanism where various activities are mutually intertwined, the health care system must have a clearly defined organizational structure. The structure refers to the inner composition of a whole set of factors, associated in certain relationships, in which each element has its role. If any of the given factors is changed, or any important characteristics, the entire structure will also change. When talking about an organization, the term *structure* is used to imply to uniform and standardized properties of the elements that make up the composition of the health care organization.

It can be easily established, even by a superficial analysis and without much effort that the position of management, leadership and organization in our health care system is in a state of chaos [13]. It is not just a superficial observation, it is a solid fact. For many years no essential prerequisite, i.e. the legislation, has been provided and the existing regulations are not obeyed. The adoption and implementation of the established legal regulations, already tested in the western European countries, have given positive results and will enable the health care policy also to approach the principles of modern business that has been established for decades and functioned independently in Europe. However, there are some new laws of business conditions in our country that deteriorated the health care system (Labor Law, Tax Law, etc.). Situation in health care organizations is due to obsolete self-managed administrative regulations, which are mostly obsolete by themselves. This kind of organization is rigid, inflexible, and therefore irrational. The health care sector has a form of an organization divided by sectors. In each sector includes rigidly defined organizational units, with each job being clearly defined along with the description of responsibilities and tasks. This organizing principle is outdated and it belongs to the so-called typical – administrative forms of organization. Such form of the organization is immobile, inflexible and it has difficulty to accept novelties and change [14] [15].

Management of (managing) the current forms of health care system organization is reduced to rigid hierarchy, where the subordinate executive is responsible for strict and consistent implementation of just what has been imposed to him in a job description or written instruction by his superior, which is reduced to bureaucratic administering, so that those in charge of running health care institutions themselves become officials - implementers, without any opportunity for creative action. This uncreative principle has found its ground in all organizational segments, and particularly during the period of self-management, so that the health care system in our country has become a dormant organism [18]. It is inevitable for this form of organization to become inert due to inflexibility and slow adaptation to modern forms of business, and thus theoretically obsolete in modern trends [11]. The current administration in our health care institutions is based on the board of directors. The Steering Committee is made up mostly of politicians and its practical function is to serve more as a political council. The steering committee, following the example of the administrative committees of the European institutions, must involve the function of creating basic prerequisites for the functioning of health care organizations - financial and educational. Primarily, it should have a business function [19]. The steering committee should have two primary responsibilities:

- obligations to the institution: to provide sufficient financial resources to institutions to perform its core business without financial burdens, i.e. there cannot be a treatment conditioned by financial difficulties and
- obligations towards the society: to control if the health care organization obeys the basic concept of using the received assets rationally.

### **Tendencies of Modern Health Management in Serbia**

A modern health care system needs a concept that includes:

- flexible organization willing to rapid changes without any consequences;
- managerial team work aimed at producing entrepreneurial projects;
- open access to new ideas in the field of health management and information technologies;

- interactive relationship with clients - the patients.

The goal of the health management is to make creative managers, experts in specific areas and specialties, being led by the principles of management and operational management [18]. Health care management includes a modern and creative approach to redistribution of duties and obligations within professional teams, and in all forms of organization and management in the health care institutions. An agile and professional management team deals with managing this form of organization, the team which is composed of specialized experts who are the driving force of the process: planning, organizing, implementing and analyzing. Regarding this managerial form of organization, it can be concluded that a manager is the pillar of this kind of organization, and must be found in all work structures starting from medical – educational, scientifically justified, technical, marketing to financial, administrative and certainly in the managing structures. It has become clear in recent years that the health care system in our country consistently follows the market economy conditions: supply – health care works and their knowledge (services), and demand – the customer service – the patients. Therefore, the definition of management could be understood as a process of performing tasks through other people, or together with them, in order to achieve organizational goals in a dynamic environment, by using limited resources. Each process must start from the need of "the customer service" and finish with their complete satisfaction. The stated principle is applicable in a narrower sense – the relationship between the health care professional and the patient or in a broader sense – the relationship between the health care professional and the health care administrator [10] [11]. Managers in the health care organizations are expected to have some basic knowledge of medicine, to be educated for leading and managing, to have the ability to apply new knowledge in medicine, and to accept the benefits of new technological achievements. Before carrying out an analysis, the three basic characteristics of the reform of health care systems in all countries in transition, starting from the Baltic to the Balkans, should be recalled. The first feature is the de-monopolization of the public health care system through privatization of large parts of the system. It has led to the fact that between 80% and 95% of the capacity of primary health care (medical centers) in countries in transition is based on the private sector with a tendency of further ownership

transformation. The second decentralization and diversification of sources of funding has been carried out by forming public-private mix of health care funds and private insurance companies. The introduction of pluralism at the level of the service providers and funding are essential features of the third basic reform, and this is the freedom of patients – citizens, to choose their doctors. By having freedom to choose one's own medical doctor, both in the public and private sector, along with funds from the health insurance system, the citizen has finally got the opportunity to exercise their health rights by the standards of modern countries. Is there anything from these general trends that has been suggested in the draft laws on the health care system? Unfortunately, not only have the proposals failed to include any of the requirements but there is an obvious step back when compared to the solutions in the neighboring countries. There are numerous system inconsistencies and ambiguities noticed in the law and also many solutions with high corruption potential. Basic principles of the modern health care system de-monopolization of “a patient free to choose a doctor” and “money follows the patient” are not envisaged by the law. A monopolistic position of public sector service providers is being strengthened opposite to all good intentions and the successful reforms carried out in countries in transition [14]. The law is also based on a monopoly of the state-run compulsory health fund; although a number of post-communist countries have spent lower share of their GDP on health care services than the Serbian health care system which is funded by several public and private health care insurance companies [3] [5] [8]. The patient still cannot freely choose a doctor in neither private nor public sector, which is opposite to the EU standards. This significantly reduces productivity, efficiency and quality of health care but provides a powerful incentive to corruption. It is a common knowledge in the economy that the legislation protecting the monopoly is the generator of the system corruption. The definition of “the basic package of services” is quite unclear since the government and the Ministry of Health have a permanent ability to change its scope and content so that citizens are unable to know what services are provided by the contribution to the compulsory health insurance [5]. This is completely opposite to the elementary rights arising from the contract relations between the insured and the insurance [5]. Besides undermining the economic system, this ambiguity also reduces the

fiscal performance of citizens towards fulfilling their obligations by contributing funds to the health insurance [15]. These legal and economic paradoxes show that the proposed concept of insurance is far below the standards of a modern health care system and that it represents an experiment with purely propaganda purposes. [11] [13] [15].

## **CONCLUSION**

It is necessary to come out of the socialist clichés of “free health care” and to attain health care system at real cost, aimed at achieving “health care with clean bills” where, except for material costs of treatment, the work of doctors and other health professionals also have a realistic market price, which is the most effective way to eliminate corruption in the health care system [15] [16]. Health insurance, the basic and possibly the additional, is paid by an individual citizen on the basis of freely concluded contracts with the health fund of Serbia, or some other financial organization authorized to provide the health insurance, where the citizens’ rights regarding the possibly available health service are clearly guaranteed to the level of the health insurance coverage.

Individual citizens, local authorities, the autonomous province of Vojvodina and the state of Serbia are financially and legally responsible for the continual implementation of the health care system, and on the bases of the obligation to protect lives and health of men in the following manner:

An individual – by paying the health insurance; local authorities - by providing service and technology to health care facilities where health care is being carried out on the basis of their own plans and needs, as well as possible health and business concepts; by decisions made by major institutions (the tertiary health care) and funding health programs and plans for citizens of with special needs in order to solve the majority of health care problems in Serbia; by a unique system of health care, supervision and legislation. The state of Serbia and the Ministry of Health cannot have any commercial impact in the field of health care, except for the protection of legislation, although they can be owners of individual health care institutions. The Health Care Insurance Fund is organized as a public and independent financial entity of freely insured individuals associated with their assembly and other public entities which main activity is covering

costs of primary, secondary and tertiary health care. The health care fund freely negotiates the contract, i.e. covers the costs of the insured for being treated at the health care facilities that provide the best market conditions for a certain type of health care, where the private and public health care facilities are in the completely equal position, as well as those owned by the local authorities and the state-owned [15] [16]. Business efficiency and quality of services provided by health care institutions are leading criteria for the Health Insurance Fund to cover costs of the treatment. The health care institutions that fail to provide quality service, or operate inefficiently, are closed down in accordance with the termination of funding by the Fund, i.e. according to the law, just like any other company [10] [11].

The leading posts in health care institutions are being filled according to the plan and program of carrying out business activities, and they are abandoned after the agreed term of office, or due to deviations, failing to comply with the business plan or criteria of modern science and medicine, i.e. a crime. Removing political system from health care institutions is the foundation for introducing market economy system in the health care operations and rationalizing the use of resources in the healthcare. Education, studying medicine and professional training for expert staff for working in the health care institutions is its integral part, and the reason why they are in close cooperation with educational institutions, express their opinions and needs regarding the quantity and quality of classes.

The medical science is an integral part of treating people and providing health care in general, and it is specially funded as a part of individual projects which must be approved in a regulated manner which is not in domain of the health insurance system [5] [14] [15].

The operations of health care institutions are public since health is the public interest as well, with an obligation of keeping medical secrets, as well as unbiased personality of the patient. The patient has an undeniable right to be informed about all aspects of the treatment, and also about possible complications that might be caused by that kind of treatment. Nobody has the right to take life from another person, even when death is inevitable. Independent professional societies are in charge of controlling the professional work of medical doctors and other health care workers, while the financial and business activities are controlled by other authorized institutions. Professional failures are subject to ethical and legal

examination, with the possibility of denying the license for work [14] [15].

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**DR. LJUBISA DJURKOVIC**

Ljubisa Djurkovic was born on June 24, 1978 in Niksic, Montenegro. He finished primary school and high school in Niksic and graduated from the Faculty of Electrical Engineering in Podgorica, Department for Electronics, Telecommunications and Computers, in March 2004.

He completed the training period in Technosteel – Niksic Company, between March 2004 and March 2005. During that period he completed his professional training at the Siemens' branch offices in Zagreb and Belgrade, where he passed all exams related to the use of software packages STEP7 and PRO-TOOL for parameterization, programming and diagnostics of Siemens' devices with special purposes, and obtained a licence for the application of acquired knowledge.

Between March 2005 and March 2006, he served as a chief electronics engineer in maintenance department in the same company. From March 2006 to February 2008 he acted as a director of technical maintenance department in the same company. In 2007, he completed his professional training in the Italian company Mair-research, where he studied software for programming SD (SILICON DRIVE) memory cards and methods of maintaining an industrial PC of ASEM manufacturer.

He has been appointed CEO of Technosteel Niksic company since February 2008.

He published four papers, some of them for conferences and some in journals, and two practical papers on distinguished websites.

He earned a master's degree at the Faculty of Electrical Engineering in Podgorica, and later on was awarded a doctoral degree at the European University in Belgrade, Serbia.

He is employed as a Managing Director of Trubostal company, Subotica, which operates within the Technosteel group.

In the recent few years, he has been intensively dealing with the issues related to managing small and medium-sized companies.

He is fluent in Russian and English.

## ADDITION TO EXTENTION USE OF CONTEMPORARY STRATEGIC MANAGEMENT

### Abstract

*In the contemporary economy, companies cannot only be preoccupied with operational problems and their solutions based on the already gained experience. Companies conduct their business activities in a branch or branches that are experiencing significant changes. In a turbulent environment, it is not easy to consider the driving forces of changes, to identify the important strategic issues and to make use of critical success factors in decision-making. The need for a strategic planning of business activity comes as a result of acting of numerous factors. There is a risk in every economic activity that a company has to accept in order to remain in the area of business, especially after the effects of the global economic crisis. A company's attitude toward the future is largely evident in the philosophy of planning that it applies in its business activities.*

### DEFINITION AND PURPOSE OF STRATEGIC MANAGEMENT

Strategic management is a concept that includes both strategic planning and strategic action in a situation when the environment changes rapidly and its resistance grows.

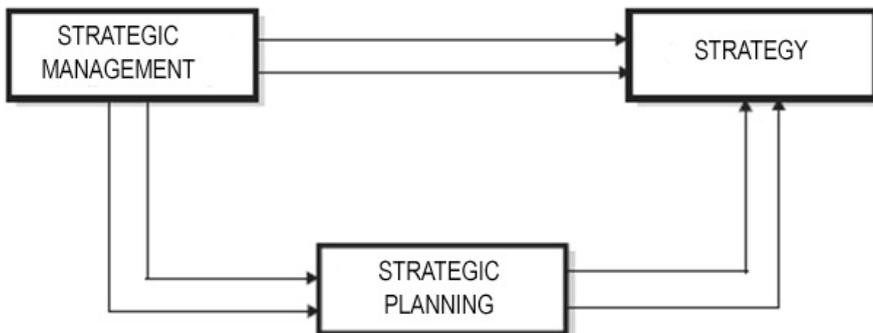


Figure 1. Relationship of strategic management, strategy and strategic planning

The term strategic management refers to the managing process which involves creating strategic vision, setting goals, creating strategies, application and implementation of the strategies, as well as initiating corrective adjustments of vision, goals, strategies and methods of application if it seems appropriate. Strategic management enables transformational changes in a company. It is reasonable to believe that strategic management should be viewed as a process.

### 1.1. Strategic management activities

Strategic management involves three activity areas: strategic analysis, strategic selection and strategic change. Strategic management implies a clear idea of environmental elements and factors, the way they are changing and how these variations may affect the operating results of companies.

There are some limitations of strategic management concept. The concept is holistic, going from general to specific, from a company to its organizational units. Another limitation is that the concept is more analytical than procedural, because it describes the logical and analytical steps that a company management has to take. The third limitation is that the concept of strategic management is apolitical.

Strategic management tends to manage all resources, in order to have a competitive advantage in an effort to create the future. Managing process enables the company to deal with environmental problems and to solve them successfully. There is a notion that changes in the environment can be operational, competitive and strategic. Problems arise when changes in the environment are not followed by an adequate adaptation of the company. Changes in the company competences are essential for the establishment of a high degree harmonization with environment. Any changes in the environment may require tactical and strategic actions. The ability to act rather than to create strategic plans is a feature of strategic management. Strategic management implies the managing process when there are changes in the environment. A systematic approach to the process of managing strategic changes consists of :

1. company positioning through a strategy of abilities planning, and
2. timely strategic response through managing strategic issues

### 1.2. Selection process and the structure of aims

The aims selection process involves finding and determining what is best to define as a state or situation that a company wants to reach in due time. Balancing the importance of individual goals and their compatibility with the main company objective is one of the most complex decisions in company. Rationally formulated goals are an essential prerequisite of minimizing suboptimization at all levels of organizational structure of company. The priorities are attitudes to the relevant importance of goals. All objectives should be mutually compatible and complementary. The structure of company objectives should be both vertical and horizontal. Selection of business objectives is not completely open but limited by already accepted commitments, place of a company in the environment as well as its potential. Rationally formulated goals have certain characteristics. First of all, the goals should reflect the purpose of the company and the prevailing social value. Objectives should be realistic and attainable. In order to motivate and orient towards the action, objectives should be understandable for those who participate in it. Goals shouldn't be generally formulated, they must be specified.

It is difficult to disagree with Schumpeter that there is no profit without development, and vice versa. In a discussion, Samuelson pointed out that profit is bloodstream of economic system. Profit maximizing isn't a good way of motivating employees, and it doesn't distinguish companies as well. In fact, all companies try to maximize profit in the long term. Essentially, profit is a metaphor equivalent to oxygen and food that the body requires. They are not the purpose of life, but without them life is impossible. Profit as the difference between revenues and costs in the short term, or as a return on ownership in the long term, is the best economic indicator of company performance in the market economy.

### 1.3. Strategy purpose and strategy adaptation

Strategy, as a decision on basic ways of achieving business goals, is focused on selection of business areas and allocation of company resources in order to create and maintain competitive advantage in the environment. Selection of business area involves positioning of company in the market and is oriented on business effectiveness. Allocation of resources is mainly an internal problem and is focused on business efficiency. Competitive advantage enables

the company to achieve above-average return. The business area is, above all, specified by the categories of customers whose needs a company intends to meet through its business activities. According to the limited company resources and their inability to, once allocated, be used again, it is important that the selection of business area and allocation of company resources are simultaneously carried out.

Competitive advantage is largely a result of company capability to properly concentrate resources (to provide a critical mass) and to provide their combination and method of use. Distinctive competence of resources and capabilities is the basis for the creation of a relatively lasting competitive advantage. Synergy occurs when business area, allocation and distinctive competence are complementary, and when they reinforce each other.

Levitt suggests that all strategies are based on the implicit assumption of what it takes to win and retain customers. Ability to adapt and the speed of adaptation are critical skills necessary for the success of enterprise in modern economy. The level of flexibility is higher if the company is able to learn not only from its own, but also from the experiences of others. Basic features of strategy are existence of strategic situation and strategic behavior. Strategic situation is a competitive interaction between different buyers and sellers of certain product lines in a particular market or business area. Strategic behavior is largely determined by affiliation of company to specific strategic group.

#### Comparative advantage of a company

Competitive position matrix (Figure 2) shows nine possible positions that a company can have in relation to competitors. The position has been established on the basis of two dimensions: relative resources - produced value for some segments (small, equal and superior) and relative costs of resources (low, equal and high), which are all relative in relation to competitive companies.

A successful strategy is rarely a copy of the activities of competitive companies. It is actually based on what competitive companies can't do or at least they can't do in a relatively short time period. Competitive advantage is expressed through strategic position the company has in its industry, the processes it uses, or the physical assets it owns. The uniqueness of strategy is based on value creation.

		Relative resources - produces value		
		Small	Equal	Superior
Relative costs of resources	Low	1 ?	2 Competitive advantage	3 Competitive advantage
	Equal	4 Competitive advantage	5	6 Competitive advantage
	High	7 Competitive weakness	8 Competitive weakness	9 ?

Figure 2. Competitive position matrix

In literature, strategic management area has differentiated two models that reflect key inputs of strategic actions of companies. According to the the first model, conditions and characteristics of the external environment are primary input and determinants of strategy according to which company achieves outstanding profits. According to the second model, there are resources and capacity of company, i.e. internal inputs, the foundation upon which the company creates strategy that creates value. Small businesses have a comprehensive strategy. Other companies have the hierarchy of interrelated strategies, each formulated at different levels in company. There are three main levels of strategy in most companies with broader production program:

1. corporate strategy,
2. strategies for particular jobs (strategic business units), and
3. functional strategies.

## **2. PURPOSE AND SUBJECT OF STRATEGIC ANALYSIS**

The main purpose of strategic analysis is to understand strategic position of company by the management. Strategic analysis is focused on the environment (opportunities and threats) and resources (strengths and weaknesses) of the company.

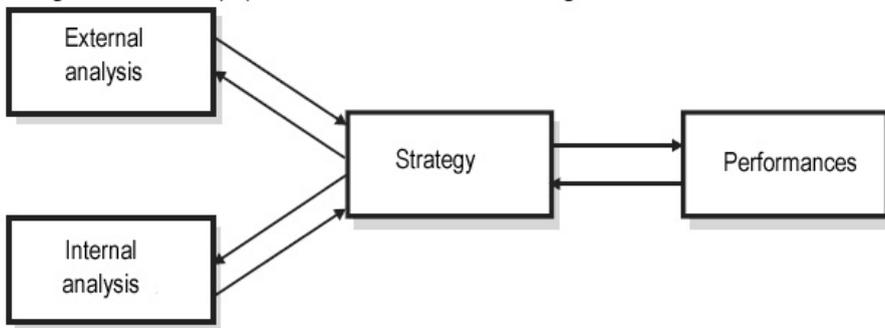


Figure 3. Basic strategy model

The basic strategy model (Figure 3) shows a direct relationship between strategic analysis (external and internal analysis) and strategy. Strategic analysis is the basis for strategic selection. Special competence is derived from two complementary company factors: resources and their capabilities.

Business success depends on the relationship between companies and the environment. Company environment determines which are critical success factors that the company needs to have and use to achieve business success. Important are those information about so-called critical success factors that exist in every business activity. Information on competition is focused on industry evolution, capabilities and behavior of existing and potential competitors in order to maintain the existing or make a new more favourable strategic position of a company. Analysis of international environment is an information base for strategic management in internationally oriented companies.

### 2.1. The role of information system

The role of Management Information System (MIS) is to help to define the problem on which a decision of strategic nature should be made, to review strategic options, to make a choice, to monitor and evaluate results of strategy implementation. Managing decisions require both information about the future course of events (feedforward) and about the implementation of decisions (feedback). Adapted to the needs of management, MIS increases the level of timely response. The informing system must be integrated into the

process of strategic management. For making decisions of strategic nature, it is necessary to create a special system for strategic informing system. Defensive informing system aims to head off surprises from the environment. Passive informing system is intended to provide data for objective evaluation of the environment. Offensive informing system aims to identify opportunities that otherwise wouldn't occur.

## 2.2. Methods of analysis and prediction of events in the environment

Forecasting implies attitude to an unknown and uncertain event. It is oriented towards the future. Futurism is interesting for companies in modern economy. President of the Institute of Futurism gave two definitions of the term:

1. any systematic effort to improve our understanding of future consequences of current development and selection and
2. any effort to systematize our assumptions and perceptions of future, possible, probable and preferred future.

Conjuncture is direction and intensity of fluctuations in economic activity in a particular period of time. Ansof and McDonnell have developed an approach that is known as gradual response to weak signals. Modern managers are particularly interested to establish the relationship between the importance and scope of changes in the environment. Delphi technique is an anonymous panel of experts who predict or estimate the probability of events in the future. One simple method is extrapolation of trend. Statistical modelling is a quantitative technique for establishing causal or at least limiting factors that connect two or more time series together.

Considering the fact that future isn't written but should be created, prospectiveness has been suggested in predicting future. A distinction has been made between information forecasting and forecasting for decision-making.

## 2.3. Scenario Method

Scenario is defined as hypothetical sequence of events constructed for the purpose of focusing on causal processes and decision points. Scenario planning provides insight into the ways in which managers can be more creative in anticipation of the future.

Shell was the first global company in the field of energy that started to use scenario planning, which has been used for decades. For

them, the scenario is not anticipation or preference; it is more coherent and reliable alternative story about the future. It is created to help the company to reconsider its assumptions, create strategies and test its plans.

Scenario designs ways in which strategic decisions are in correlation between the events that lead to specific business outcomes in the future. The scenario speaks about the future of each alternative set of assumptions. It is possible to create two types of scenarios based on the expectation of change - continual or disruptive type. Continuous scenario proposes an extension of the present, including some modest changes, while disruptive scenario suggests a significant deviation from the existing state of affairs, a turning point that will create new threats and opportunities, forcing the company to change its business models, processes, and the like.

The scenario method allows formulation of not only flexible plans but also adaptable strategies. This is done in such a way as to construct scenarios for the most likely optimistic and pessimistic future (Figure 4).

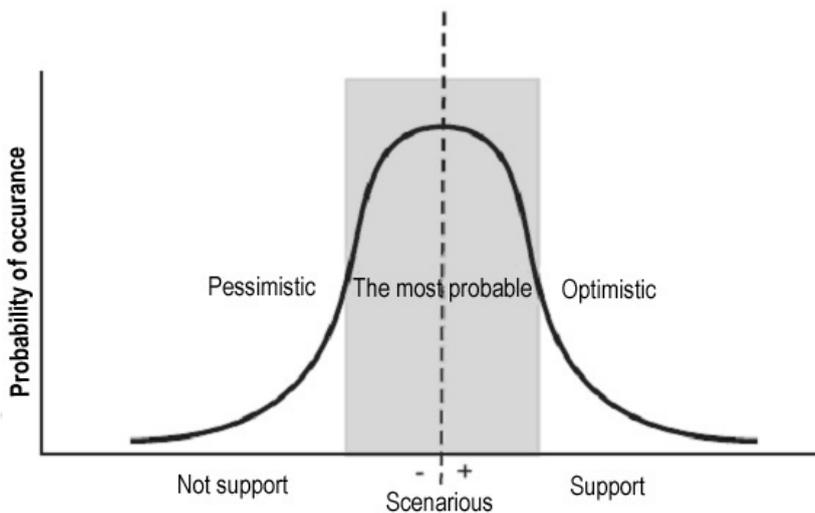


Figure 4. Probability for three alternative scenarios

### **3. RESOURCE ANALYSIS AND COMPANY ABILITY**

External analysis aims to answer the question of what a company may choose to do, and internal analysis helps it to answer the question of what it can do. Tangible resources are assets that can be seen, felt and/or quantified. Intangible resources are the intellectual property rights of patents, trademarks, know-how, organizational culture, products reputation, services and the like. The strategic value of resources is determined by the degree to which it contributes to the development of skills, competence substance and ultimately to maintain competitive advantage.

There is also a division of resources to those based on ownership and those based on the knowledge. Evaluation of resources can be carried out for a company as a complex unity, but also as a unique entity, as well as for its relatively independent business units (with or without their independent status) and also for its individual business functions. The evaluation allows the creation of strategies that are based on the use of resources, because usable resources contribute to the special competence, which is the basis for creating of competitive advantage. The strategy that uses well-used basic resources and capabilities of an enterprise is requested.

It is not easy to assess the contribution of each resource of production potential because they act more complementary than individually.

Evaluation of a company capacity criteria are adoptability, durability, portability i.e. transverability and imitation. Adoptability is important because it is not easy to specify the limits of available database of resources. Durability is an important criterion for assessment of the a company capacity to make profit and its relatively enduring competitive advantage. Portability (transferability) is important for determining the extent to which transactions, transportation costs and special company resources resulted from competitors inability to obtain resources under more favorable conditions. Imitation (duplication) refers to difficulties and time needed for competitors to imitate resources and capabilities of an enterprise.

#### **3.1. Defining the Core of Competency**

The essence of competence is a new term used to explain the basis for creating a competitive advantage. Hamel points out that competence has three different dimensions:

1. functionality,
2. market access,
3. integrity of a product.

The essence of competence may be contained in every dimension. The concept allows you to have an insight at what activities should a company vertically integrate, and what it should leave for other companies to perform. Hamel points out that the strategy is expansion rather than compliance. It should expand resources, and not only to allocate them. That is why he disagrees with those who perceive the strategy only as positioning in an existing branch. The emphasis is on competition that shapes the industry rather than competing for the position of an existing industry. Competence is the ability of a company to maintain coordinated use of resources in a way that will achieve goals. Creating competence occurs when a company acquires and uses new high-quality diverse assets, capabilities and ways of coordination.

Companies that survive and grow over a longer period of time are those that are different from each other in the ways that continually create and supply resources, which can be used to improve existing strategic capability or to create a new one. Forces have a strategic significance when enabling strategic superiority. As well as the strengths and weaknesses, they can be strategically important. Resources must be reallocated during the process of strategic management in order to remove the basic vulnerability. The emphasis of the analysis is on those internal factors that have strategic importance.

### 3.2. Analysis of Opportunities and Threats

The environment affects the company's strategy in several ways. It may create opportunities or threats for the company. The environment shapes the rules which are used for application in certain industries.

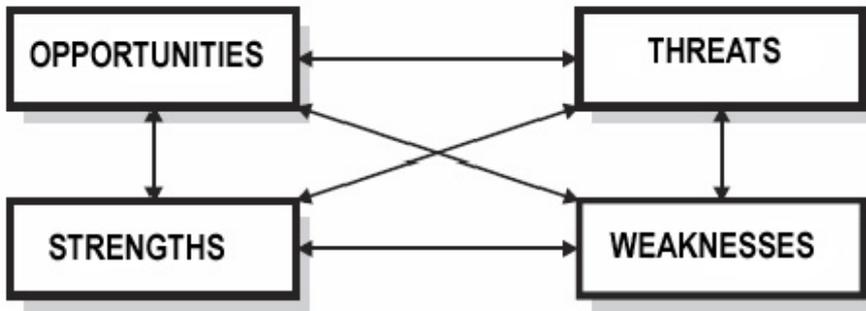


Figure 5. Relations in the SWOT or WOTS - UP analysis

SWOT analysis is the most popular technique used in strategic management. SWOT can be used to widely consider the strategy using the following formula:

$$SA = O/(S-W)$$

that is: strategic alternatives equal opportunities divided with power minus weakness. It allows you to answer an important question - whether to invest more in power of a company in order to be stronger (distinctive competence) or to invest in the weakness to make it competitive. The analysis allows establishing the relative competitive position. Golden opportunities are irregular events when a company can make significant profit in a short period of time.

When management estimates that the disruptive changes will significantly affect the business, the way the management perceives influences determines how a company responds and allocates resources. Profit that a company can make in an industry depends on three factors:

1. the value of products and services for consumers,
2. competition intensity between different manufacturers and
3. relative bargaining power between companies as well as between companies and individuals at different levels in the production chain.

Observation of a company, as a portfolio of business opportunities in different phases, is suggested. Determination of existing and potential size of the industry helps to determine its attractiveness for the company. Industries with significant growth rates do not only represent opportunity but also threat.

There are two approaches in the analysis of the environment, and companies can use one or both in varying degrees of integration. The first approach is outside - inside or macro approach. The other is inside - outside or micro approach.

There are three ways of perceiving the environment. The first one, scanning the environment, includes the study of the external environment in order to anticipate changes in it, to detect and identify changes that are underway. The second, monitoring the environment, observes the evolution of trends in the environment, the series of events and trends of activities. The third way – competitive notification, helps a company to understand its industry and identify the strengths and weaknesses of its competitors. Environment prediction - scanning, monitoring and notification are essential inputs for the analysis of external environment.

### 3.3. Analysis of the Structure Industries

The state of competition in the industry depends on five basic competitive forces whose collective strength determine the potential profits in the industry, when the profit potential is measured in terms of long-term return on invested capital. All industries do not have the same potential. Working definition of an industry is: a group of companies that manufacture products that are narrow substitutes.

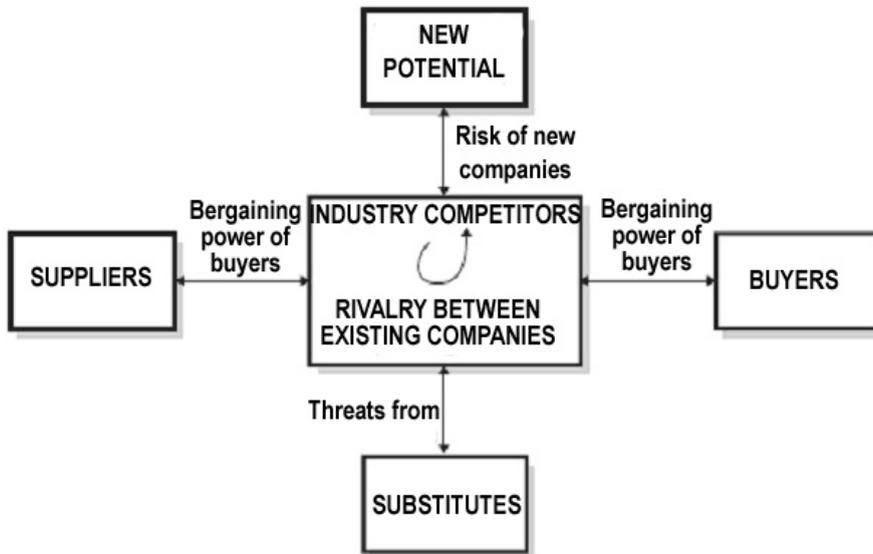


Figure 6. Factors that determine industry competition

If a company is able to overcome the barriers, there's no reason not to become an attractive industry with significant potential for profit. The pressure from substitute products is a real threat for companies in one industry. Bargaining power of consumers depends on the market characteristics and the relative importance of their purchase when compared to the total business of an enterprise. Bargaining power of suppliers may be found in their ability to increase prices or lower the quality of its products and services, compared to the total business enterprise. There is always certain degree of rivalry among existing firms in the industry. There is always the rivalry when one or more enterprises want or are forced to look for opportunities to improve their position.

#### 4. CONCLUSION

The paper was aimed to contribute to the application extension of the modern strategic management in enterprises. In the first chapter, we analyzed the importance of strategic management as a process in the modern enterprise, through three areas of activity, strategic analysis, choice and change. The second chapter presented the basic model of strategy, as the basis for strategic choice. We analyzed the company success in the function of mutual relations of an enterprise and the environment in which it operates. In the third chapter, we gave an overview of resources and capabilities of an enterprise, defined core competencies and presented the analysis of opportunities and threats through the SWOT analysis of enterprises, as one of the most popular techniques used in strategic management.

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Dr. Slobodan Adzic is the Adviser to CEO at HIP-Petrohemija, Pancevo, the leading Serbian producer of petrochemical products. Previously, Dr. Adzic was the Chief Executive Officer at PETROHEMIJA, as well as AB KONSTRUKTOR, a Serbia/Montenegro-based building construction contracting firm and was a Branch Director at Delta General Insurance. He also worked as President of Executive Council (City Manager) for The Municipal Assembly of Pancevo, a Marketing Manager at Digitron, a Consultant for Yugoslavia at BITTNER GmbH, a Sales Director at Phytomedic, a Vice President at MARK-PLAN, and Head of the Promotion Department at DUGA IBL. Dr. Adzic holds a BSc in Marketing from The Belgrade University, an MBA from Lancaster University Management School and a PhD from Megatrend University in leadership. He speaks Serbian, English, and German.

**ANALYSIS OF THE UNSUCCESSFUL LEADERSHIP APPROACH IN HIP PETROHEMIJA**

**Abstract**

*This paper presents analysis of case study HIP Petrohemija, which shows that the reasons for the failure of leadership approach in this company rooted resistance to the changes in the organizational culture of this company and government involvement in managing the company.*

## **1. INTRODUCTION**

Leadership, although well known in world practice for centuries, is a new management discipline. We are witnesses of a growing number of papers on leadership in the West. This trend will likely go on in the future. Slowly but surely it is reflected in our country, too. Inevitably, we raise the question whether the new leadership is the Holy Grail of management or just management's new mantra. As an example, for the analysis we will show a big national company, HIP Petrohemija, Pancevo, where we found the leadership approach in the company, but also the failure in implementing changes.

In case study HIP Petrohemija we analyze collected data using models, with known specifics in case studies analyzing, which requires that the analysis is performed only in space and time covered by the case study. The complexity of the case study caused that the data after examines with leadership models should be amended with management models. Such amendments have contributed to more consistent results (for details see [1]).

## **2. CASE STUDY “HIP PETROHEMIJA”**

### **2.1. History and the (broken) technology links**

HIP Petrohemija, Pancevo was founded in 1972 and production began in 1977 with the designed capacity of 1.1 million tons per year. Full production took place until 1991. UN economic sanctions (1992-1996) terminated the production and delivery of ethylene and propylene to neighbor countries. Production with full capacity re-launched in May 1996. During the NATO bombing in 1999, the lines of chlorine in the VCM and chlorine plant were destroyed. Since 2000 the production was on average 600,000 tons of petrochemicals per year. Production with reduced capacity generated losses. In 2004 the Government of Serbia was adopted and approved the program of business and financial consolidation, which was only partially implemented. The consequences of sanctions, bombing and lack of financial support from Government for reconstruction led Petrohemija to the complete loss of working capital and the

accumulation of losses, so in 2009 Government again initiated a restructuring program.

Construction of Petrohemija was strategic development phase of an integrated complex of Oil Refinery Pancevo and Chemical Industry Pancevo. Project was based on raw materials and energy exchange between Petrohemija and Oil Refinery Pancevo. Although a technical-technological unity was complex, the merging of these two systems has never occurred. The Refinery delivers to Petrohemija virgin naphtha and heavy fuel oil, and Petrohemija delivers to Refinery pyrolytic gasoline and energy fluids, and carried out the transformation of electricity and waste water services, too. Between these two factories has built the complex system of pipes. It is important to say that the capacity of Petrohemija not comply with Refinery capacity in terms of virgin naphtha, because the capacity of processing of virgin naphtha in Petrohemija is almost doubled. This requires import of the missing quantities of virgin naphtha.

Petrohemija and Refinery development programs were based on mutual agreed logic of their technical and economic cohesion, and to further mutual integration. However, the integration of Oil Refinery Pancevo conducted in 1991 in the other direction, in NIS (Oil Industry of Serbia). Democratic changes have heated up expectations about integration of NIS and Petrohemija, in order to increase the business efficiency and to provide favorable conditions for the forthcoming privatization. However, after the sale of NIS to Russian's GazpromNeft, the situation of Petrohemija rapidly is deteriorating. GazpromNeft changed the strategy for Refinery and started the project of building new and reconstruction of existing facilities, with the intention to use all virgin naphtha as raw material in their factories. Petrohemija thus remains without virgin naphtha from domestic sources and it will be forced to buy on foreign markets, burdened by high transport costs and/or to work with an extremely low capacity of the Ethylene factory and logically with the negative financial results, and with the uncertainty how much more such business can maintain. Providing mortgage guarantees to Petrohemija factories of waste water treatment, energy and transformation of energy for paying the debts left by the time of state company NIS to GazpromNeft is causing an independent Refinery in Pancevo with significantly less technological connection to Petrohemija. The technical and technological integration from the previous period turned into a

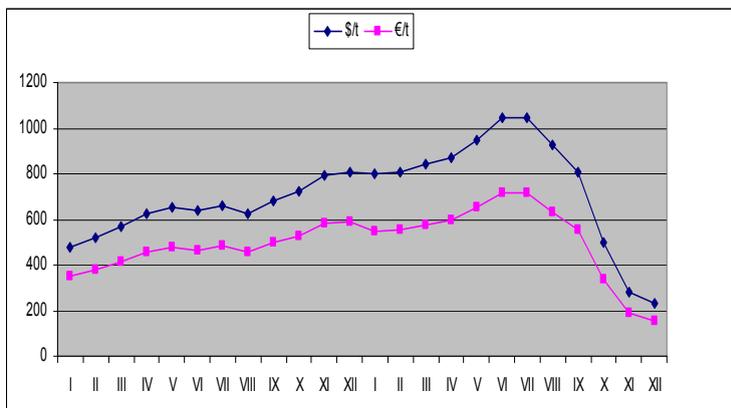
technological independence of Refinery and technological dependence of Petrohemija to Refinery, which can theoretically separate Petrohemija of these vital plants and shut down Petrohemija even without bankruptcy.

Petrohemija had the technical-technological, financial and commercial links with the Romanian petrochemical plant Solventul. Dimensioned Ethylene plant capacity of 200,000 tons per year were based on consumption of ethylene as intermediates in plants VCM, LDPE and HDPE in the quantity of 160,000 tons per year. The rest of 40,000 tons per year ethylene, according to the main project, was exported to the Romanian partner Solventul, Timisoara. Also, propylene, as a fraction of the ethylene cracker, was delivered to Solventul in a quantity of 40,000 tons per year. For these products Petrohemija has received final products - compounds, and also part of the missing amount of virgin naphtha. Business and technical cooperation lasted until the UN sanctions against former Yugoslavia. It was logical to expect that after the lifting of sanctions business cooperation with the Romanian petrochemical plant will continue. However, the business decisions of the former management, with the tacit approval of the Government, caused that the cooperation hasn't continued. Thus Petrohemija lost ethylene and propylene market, which effectively reduces the capacity of ethylene cracker to 80% of projected technical capacity. Consequently, after some time Romanian partner comes to bankruptcy.

During the NATO bombing in 1999, the capacities of the vinyl chloride monomer factory (VCM) were destroyed. VCM was used as intermediate the ethylene in a quantity of 80,000 tons per year. After destroying the VCM practical capacity of ethylene cracker is reduced to 60% of the projected technical capacity.

## **2.2. World economic crisis and Petrohemija**

Reduction of global industrial production, demand and purchasing power caused the sharp decline of price of the main raw material of Petrohemija virgin naphtha, from the third quarter of 2008. Fig. 1 shows us the Platt's SPOT prices of virgin naphtha (i.e. sold on FOB Mediterranean Sea). At the beginning of 2008 price was \$ 803 per ton FOB Mediterranean Sea, in July the price was \$1,050/ t, in November only \$ 278/ t.



**Figure 1: Prices of virgin naphtha at the world market (January 2007 - December 2008)**

This situation affected hard the petrochemical industry, with such reversal from the third quarter that these could not expect even the worst pessimists. The growth of the petrochemical industry in Europe in the past followed the cycle of economic growth at a rate of 120% to 140% of GDP growth. Before the economic crisis it was estimated that the growth in demand for petrochemical products in Central and Eastern Europe will reach 4.4% in the period between the years 2005 and 2010. Growth rates of production, capacity utilization, demand and consumption, that were positive a few years ago, went not only down in 2008, but have moved in to a negative value. Prices were in decline. The system of quarterly contract prices for olefins in the fourth quarter prevented their big fall, but almost all customers vanish from contractual olefins market. There was a large difference between contract and spot prices. Contract price of ethylene was € 1,120/ t, and the spot price in mid-December amounted to € 500/ t, which is pure nonsense, because the spot price or buying in “open” was always higher than a contract one. Basically all market activities happened in the spot market. Prices continued to fall down in the beginning of 2009 too.

Production of ethylene in Europe in previous years was 2.8% per annum. In 2008 trend was negative in amount of -6.2%. This is a consequence of reduced domestic demand, whose rate in 2008 was -6.5%. The level of capacity utilization of ethylene crackers fluctuated

previous years around 90%, while the 2008 drop to 83%, and the next year at 79%. Decline in production of ethylene and efficiency of ethylene crackers in Europe in 2008 was the result of the demand. In 2009 another reason arisen. This is a start of new ethylene capacity in the Middle East from 4-5 million tons which will shake the European market in the beginning of 2009. The presence of ethylene from the Middle East in Europe is inevitable because they produced ethylene cheaper and thus more competitive than the European. This will challenge the profitability of many European plants with older technology or with smaller size. Extremely large numbers of petrochemical plants were closed during the crisis, and many were bankrupted.

Supply of virgin naphtha in Petrohemija in 2009 proceeded with extremely difficult conditions. In the first quarter Petrohemija operated with unstable capacity, partly due to the problems in the supply of basic raw materials, and partly because the market was a limiting factor due to the decrease in demand for petrochemical products. In the second quarter, the lack of virgin naphtha caused that the factory operate on minimum of capacity. With the inability to further secure raw materials, Petrohemija stopped production in late June. In mid-September, production continued with the difficulties of supply and with reduced capacity.

**Table 1: Projected results of Petrohemija with assumption of full capacity production in 2009**

POZICIJA	IZNOS	
	U DINARIMA	U €
<b>I POSLOVNI PRIHODI</b>	<b>27.637.790.145</b>	<b>292.657.874</b>
1. Prihodi od prodaje roba	26.395.854.780	279.506.961
2. Prihodi od aktiviranja učinaka I robe		
3. Povećanje vrednosti zaliha učinaka	7.854.547	83.172
4. Smanjenje vrednosti zaliha učinaka		
5. Ostali poslovni prihodi - prihod od usluga	1.234.080.818	13.067.740
<b>II POSLOVNI RASHODI</b>	<b>28.552.720.581</b>	<b>302.346.116</b>
1. Nabavna vrednost prodane robe	0	0
<b>2. Troškovi materijala</b>	<b>21.984.887.868</b>	<b>232.799.023</b>
od toga: - sirovi benzin	19.371.771.772	205.128.612
- ostale sirovine	1.582.454.099	16.756.682
- hemikalije,	716.760.908	7.589.815
- ambalaža	313.901.089	3.323.914
<b>3. Troškovi ostalog materijala (Rez.delovi i režijski mat.)</b>	<b>171.805.412</b>	<b>1.819.256</b>
<b>4. Troškovi goriva i energije</b>	<b>3.061.060.407</b>	<b>32.413.714</b>
od toga: - elek. energija	711.303.687	7.532.029
- mazut	1.980.664.210	20.973.347
- prirodni gas	336.978.253	3.568.279
- goriva za transportna sredstva	32.114.256	340.059
<b>5. Tr.zarada, naknada zarada i ostali lični rashodi</b>	<b>1.800.000.000</b>	<b>19.060.286</b>
<b>6. Troškovi proizvodnih usluga ( transport, održavanje)</b>	<b>181.117.557</b>	<b>1.917.862</b>
<b>7. Troškovi amortizacije</b>	<b>1.199.073.245</b>	<b>12.697.044</b>
<b>8. Nematerijalni troškovi (porezi, osiguranje, platni promet)</b>	<b>154.776.092</b>	<b>1.638.931</b>
<b>III POSLOVNI GUBITAK</b>	<b>914.930.436</b>	<b>9.688.242</b>

The company in 2008 generated a loss in amount of € 91,576,562 while the first six months of 2009 generated operating loss of € 39,999,486. To illustrate, we'll give projected financial results for 2009 under the assumption that the processing of virgin naphtha was at a maximum level of 1,560 t/day (Table 1). We can conclude that Petrohemija generate multi-million losses (almost 10 million) and when running with "full steam".

### **2.3. The arrival of new CEO and a new strategic plan**

Managing Board of Petrohemija 28/12/2008 voted a new CEO and then the new and completely changed Board of Directors. The new CEO and President of the Executive Board of Directors was an outsider, while the other members were insiders. The company was taken under extremely difficult circumstances. In the context of the overall cost optimization business leadership team was able to reduce the losses on monthly bases. The monthly loss since December 2008 to March 2009 was reduced by more than 260 million dinars, but because of business conditions loss still was over 500 million dinars per month.

The main difference between the old and new (Fig. 2) development plan, since both assume investment in polyethylene (PE) and polypropylene (PP) plant is reducing the planned capacity in polypropylene plant. In fact, the old plan calculated the amount of propylene in Petrohemija and credited those amounts that NIS have and future amounts of planned constructions of new facilities. As the NIS was sold to GazpromNeft, the old plans are no longer valid and those two companies are now under different owners from different countries, so it is very necessary for Petrohemija to turn itself and its development, possibly including just the current amount of propylene available from NIS. That was important in order to significantly reduce the required investment funds. It is also important to note that the global crisis further reduced the cost of new plants, creating an excellent time to start with new investments and further, that the closure of many factories in the time of crisis caused the offer on the market of used plants as much as 5-10% of the value of new ones.

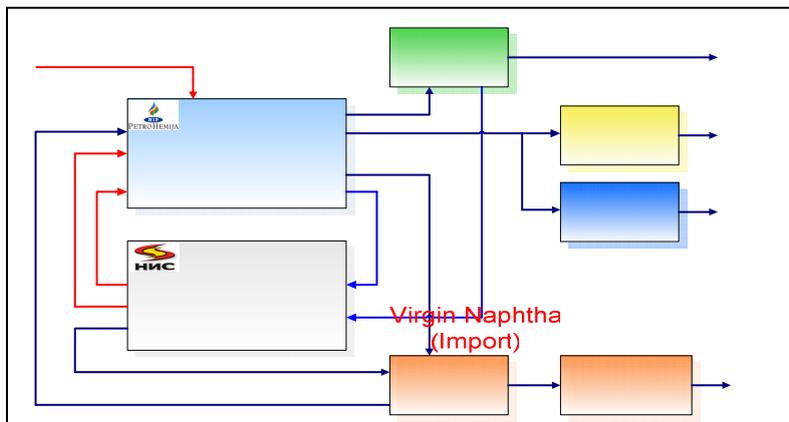


Figure 2: A new development plan of Petrohemija (2009)

The total amount of investment is approx. € 94.3 million, of which more than half (50 mil.) for the new PP factory. For HDPE the completion of reconstruction requires € 8 million, as already bought equipment worth € 3 million, while the estimate for LDPE is € 17.5 million. Modernization and achievement of the highest level of eco-standards for ethylene plant is planned in the amount of € 16.5 million, and waste water factory need another € 2.5 million.

ETHYLENE

206.000 t/y

factory. For

factory.

Virgin Naphtha  
Refineries

NIS RNP

Table 2: Marginal analysis of investment in Petrohemija

Primarni benzin	Dnevna potrošnja Mesečna potrošnja (mt)	Maximalan aktuelni kapacitet 1500 m <sup>3</sup> /dan 45.000	Kapacitet nakon investicija 1900 m <sup>3</sup> /dan 57.000	Kotacije na dan 25. feb. 09 Platz/ ICIS 288	Ukupan mesecni rashod za primarni benzin (EUR/mt)	
					1500 m <sup>3</sup> /dan 12.949.200	1900 m <sup>3</sup> /dan 16.402.320
Etlen	Prinos 0,3	13.500	17.100			
Etlen za prodaju		1.382	1.407	540	746.468	759.749
LDPE	0,12	5.040	7.200	725	3.654.000	5.220.000
HDPE	0,18	7.078	8.493	710	5.025.096	6.030.115
Propilen	0,147	6.615	8.379			
Propilen za prodaju		6.615	-	304	2.010.960	-
Polipropilen		-	7.960	650	-	5.174.033
C4 frakcija (ne prodaje se)	0,087	3.015	4.959			
Butadien (ne prodaje se)	0,048	1.958	2.480			
SBR	0,032	1.440	1.824	900	1.296.000	1.641.600
MTBE	0,025	1.125	1.425	350	394.170	499.282
RAF II (ne prodaje se)	0,02	900	1.140			
Piro benzin	0,234	10.530	13.338	363	3.817.942	4.836.080
Piro ulje (ne prodaje se)	0,056	2.475	3.135			
PV gasine (ne prodaje se)	0,177	7.965	10.089			
				<b>UKUPNO:</b>	<b>16.944.634</b>	<b>24.160.838</b>
<b>Udeo rashoda za benzin u ukupnom prihodu od direktne prodaje</b>				<b>u procentima:</b>	<b>76,4%</b>	<b>67,9%</b>
				<b>Razlika: Benzin-Proizvodi (EUR):</b>	<b>3.995.434</b>	<b>7.758.519</b>

*Napomene:*  
 1. U prihod su računati samo oni proizvodi koji se plasiraju na tržište  
 2. Cene proizvoda su uzete iz kotacija na paritetima koje daje odgovarajuća kotacija u eur/mt preračunato po kursu eur/USD koji je u njoj objavljen.  
 3. Povećanje kapaciteta nakon investiranja obracunato je kod PEVG-a za 20%, PENG-a 42 % dok je polipropilen obracunat samo na količinu propilena koji bi se proizvodio u PHK  
 4. Računato je samo učešće troškova benzina u prihodu od proizvoda koji se plasiraju na tržište pa je procentni udeo veće nego što je realno, kada se uloške unesu i ostali elementi (energija, pomoćni materijali fiksni troškovi itd.)

C4 frakt  
Ethylene

C3 frakt

Pyrolytic Gasoline

Table 2 shows that the additional monthly income, based on the increase in capacity of new production, calculated on the basis of stock market prices, is € 3,763,085, or annually (operating year is 8,000 hours, or 11 months) € 41,393,935. If we consider that investments are € 94.5 million, we can calculate that return on investment is only 2.28 years. We can conclude that the feasibility of investments in Petrohemija is socially acceptable and, above all, very profitable.

#### **2.4. Business policy toward strategic partners and the effects of restructuring**

The investment program assumes an investment in a polypropylene factory and also polyethylene capacities enhancement. Interest of a strategic partner is profit with minimal risk, and this can be achieved by establishing a joint venture company, where a strategic partner should finance the PP plant, and Petrohemija should give land, infrastructure and raw materials. The next step would be to purchase other Petrohemija factories in order to complete the purchase of the entire production process. Thus, the whole process would go through a new legal entity.

To protect the production, the strategic partner would have to make business relations with joint-venture and Petrohemija both, and the Government would react positively if a strategic partner will took over the rest of the investment. In this case, the strategic partner would have to seek guarantees from the Government for future ownership of Petrohemija. It can be proposed to Government the managing of state-owned stocks from a strategic partner, and upon completion of the investment cycle and entering the state of positive performance the new valuation of shares, with the obligation that strategic partner has to pay the Government shares from the future inflows. Something similar has not been done in Serbia, but it is legally feasible. Of course it is possible to propose a contract with fixed future payments from the Government to a strategic partner immediately after the entry of strategic partner in Petrohemija. It is crucial that a strategic partner has or makes a good relationship with GazpromNeft.

In accordance with the long-term successful cooperation between HIP - Petrohemija and our company, as well as on the basis of preliminary discussions that we've had, with this letter we express our interest to participate in the financing of further development of Petrohemija.

The specific modalities and the realization of our participation in this financing would certainly be the subject of detailed analysis and agreement during our next meeting, but at this time, given the situation on the world market, [REDACTED] expresses its primary interest for the construction of a plant for the production of polypropylene because of the raw material base, which Petrohemija already has available and which would be used in a much more economical way.

We believe that the positive experiences that both sides have had in the previous period are a good basis for the continuation and expansion of future relations between our two companies.

Yours sincerely

**Figure 3: Letter of Intent of a potential strategic partner sent to Petrohemija in 2009**

Based on this analysis, a business partner, a present buyer, was interested to become a strategic partner of Petrohemija. However, after receiving a Letter of Intent from potential strategic partner (Fig. 3), a scheduled meeting at the Ministry of Economy and Regional Development has never held. Soon after that the resignation of CEO of Petrohemija happened in August 2009.

The restructuring plan is proposing the key investments in HIP Petrohemija in period 2010-2012 in the total amount of € 64,625,000. It is important to note that investment in polypropylene plant does not exist in this document.

**Table 3: Comparison of Petrohemija in year 2010 with the preceding period**

	2005*	2006	2007	2008**	2009***	2010
Proizvodnja, kt	612	669	694	656	423	526
Ukupna prodaja, € mil.	255	319	357	359	141	271
Izvoz, € mil.	163	206	214	205	107	218
Domaće tržište, € mil.	92	113	143	154	34	53
HIPP udeo u ukupnom srpskom izvozu	4,5%	4,1%	3,3%	2,76%	1,8%	2,95%

\* 2005. juni - jednomesečni generalni remont  
 \*\* 2008. septembar / oktobar - tronedeljni generalni remont  
 \*\*\* 2009. kraj juna - druga polovina septembra - zastoj

After analyzing the data in Table 3, we can conclude that the quantitative production in 2010 was even lower than it was in 2009. As in 2009 Petrohemija produced only 9 months, 9 months of average production in 2010 is 395 t (75% of 526 tons), which is 7% less than in 2009 (423 tons). Operating result, on the other hand, shows that revenue rose in 2010 as much as 42%. This is a good indication that the petrochemical industry is not anymore in recession and crisis. An important reason for the lower figures in Petrohemija is the continued shortage in supply of virgin naphtha. In new financial statements is no item the expenditure of energy (about € 3 million) monthly, because it will likely continue the trend of actual writing off of debts for worthless shares (EPS and Srbijagas don't charge for debts and because of that they became the new shareholders of Petrohemija). But even these reports show us that the company continues to generate huge debts and that is still in deep crisis.

### **3. THE CASE STUDY ANALYSIS**

#### **3.1. Leadership situation in HIP Petrohemija**

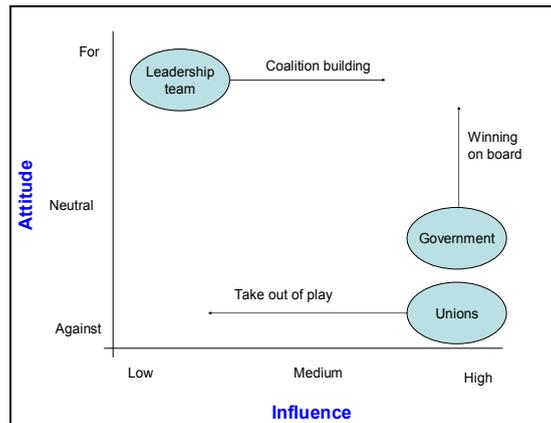
Worker unions, organized to protect the rights of workers, often remain blind to the problems which faced organizations and companies. Their lack of reality causes a great resistance to changes, and their actions have retrograde or even undesirable effects. To resolve this problem, the United Kingdom in the era of Thatcherism and the United States in the era of Reaganomics drastically reduced the influence of unions. The results were the success in changes and success in development. The countries that have failed are now in trouble, especially in time of economic crisis. With a decrease of 7.1% of the economy, unions in Romania demand rejecting of the Government saving plan that they have already signed and they are also seeking a new agreement with IMF. Rescue from bankruptcy and commitment of the Greece Government to fiscal consolidation this Government sees as a victory, but it is actually in great stress because of political pressure from the unions. And in Serbia is not a better state. Unions have forgotten their *raison d'être* and they are coming to the position outside their jurisdiction. A similar story is with the unions in Petrohemija. Three representative worker unions, disunited in union questions, but united when it comes to business matters, which is beyond their jurisdiction, made the persistent pressure on the

management and the Government to abandon the changes in order to Petrohemija does not change anything. Government supposed to pay monthly subsidies to maintain company live, according to their opinion. And in the past unions have been devoted more to change the directors and to influence in business, but not to the rights of workers.

Mijat Lakicevic in the NIN magazine editorial says "Serbia is the stiffed society, oriented to the preservation of the status quo, unwilling to change, static and not dynamic." Professor Mladen Kovacevic in an interview in the daily newspaper Blic says that "the Government running the country into bankruptcy", and Professor Vladimir Vuckovic in the article published in the daily newspaper Politika writes that "we are facing the collapse of state as a result of poor economic policies." Government has been very active in dealing with Petrohemija and issuing the decision which are in fact the competencies of the Board or Directors (e.g., the determination of wages). However, Professor Slavisa Tasic in NIN claims that "we have privatization because it showed that the Government or more precisely, politicians do not know how to lead the company, unless they have not a monopoly. And if Government do not know how to lead companies, how to expect from Government to save them?" That Government is a bad businessman shows also a Research of the Institute for Development (see [3]), which shows that public companies are highly indebted because they made loss in 2008 of 52.9 billion dinars, what was more than four times higher of 11.4 billion profit. Professor Zorana Mihajlovic Markovic, a former energy adviser to the Government of Serbia, says (see [4]) that on the Petrohemija could fall all Government and that "if there would be a Nobel Prize for stupidest moves in the economy, those people representatives of the political establishment, which defined the strategic steps of the company, would have won."

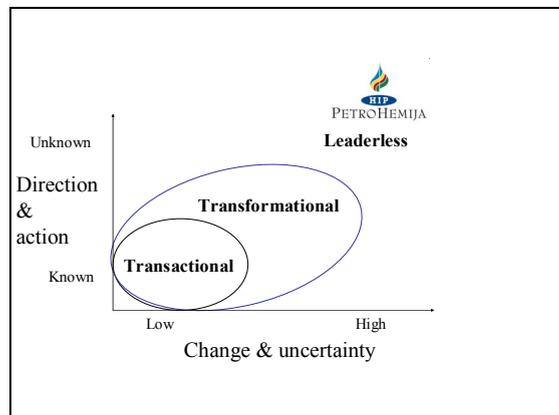
It is obvious that the Government did not follow the advice and analysis of the leadership team from Petrohemija. On the contrary, the Government has sided with the union, which confirms the view of the political analyst Dusan Pavlovic from an article in the NIN that the economic disruptions resulting from the captured Serbian economy (state capture) in which some groups, such as unions, managed to impose their individual interests above the common. "Capture" of Government, the destructive power of unions and the inability of leadership team we can graphically analyze through Stakeholder

matrix (according to [5]), in which we are positioning the participants on the basis of attitude towards the changes in Petrohemija and their impact (Fig. 4). In the matrix are also shown the recommended strategies for achieving change according to the positions of participants.



**Figure 4: Stakeholder matrix of the case study HIP Petrohemija**

Such relationships have contributed that leadership team of Petrohemija finds that in managing complex change, the direction and actions of stakeholders with the main influence, Government of Serbia, were unknown. On the basis of unknown direction and action and high-change and uncertainty, we can conclude that the style of leadership (see [6]) that enforced the leadership team of Petrohemija was leaderless (Fig. 5). Such a style must result in failure.



**Figure 5: Leaderless style of the leadership team in Petrohemija**

That the attitude of union against changes was based on the attitude of followers, or employees of Petrohemija, shows us the equation that explain that changes are determined with three components (A, B and D) and that it is necessary that all are evident by an individual for readiness to take the changes (see [7]):

$$C = (A \times B \times D) > X$$

When:  
C = Change  
A = Level of dissatisfaction with the status quo (1)  
B = Desirability of proposed change  
D = Practicality (risk of disruption) of change  
X = Personal cost of changing

Change happens when  $C > X$ , and the situation in Petrohemija was and it is that  $C < X$ . The personal costs of change for workers were relatively high. Announcing that almost half of employees are surplus based on the current operations and planed outsourcing of the non-core activities, as well as the proposed reduction of wages by half, by far exceeded the left side of the equation. The level of dissatisfaction with the status quo in general was not high, since the workers have learned for years that in a heavily debited company have the wages above average, and also an easy life by using benefits e.g., paid recreation at the resort "Hunter", during which they received full salary and all of that was paid by someone else. The desire for change and the recognition of it definitely is something that workers in general "do not meet." The reasons for this are visible in the organizational culture of Petrohemija.

Organizational culture (see [8]) is the determinant of ability of an organization to adapt to the changing environment, and failure to implement the change strategy is a consequence of incompatibility of strategy and cultural pattern. Chemical Industry Pancevo – HIP doesn't exist for thirty years and Petrohemija still has HIP in its name. And not just in name, workers from Petrohemija will always pronounce HIP Petrohemija. A strong desire to live in the past when were good times is the basic symbolic artifact of culture in Petrohemija, which stops any desire for change. It is well known in Pancevo that most people can't stand workers from the southern industrial zone, especially from Petrohemija, due to pollution and high salaries, and it would not be the case if workers from Petrohemija do

not hold themselves as a clan, a large and powerful one. So why should they admit the harsh reality and enter the changes. On the basis of a culture, union as a formal high cohesive and dynamic group, becoming a spokesman for such attitude that excludes the changes and development.

Kotter argues that the changes come last, not first and that changes are a result of the transformation process of eight stages (see [9]). In Petrohemija leadership team didn't succeed in changes, because it failed to challenge even the status quo, what concerns the first four stages of the process. The sense of urgency wasn't established, because there was a dose of complacency with the present situation. Although people understand the situation in the company, they have learned that the Government will pay when the situation becomes unsustainable. The leader and his team remained isolated because they had no chance to break tradition and inertia, and to develop leadership coalition. Leadership team has developed a vision and strategy, CEO was communicating a vision not only through the company letters, but also with the help of mass media, toured the facilities and talked to the workers, but he failed to "sell" it. Barriers against changes in mind-blockers unions and Government have undermined all the efforts and the resignation of CEO was the only natural solution. Yukl also (see [10]) argue that CEO has little impact on organizational performance, if he is restricted by strong stakeholders, internal coalitions, strong culture, lacking resources, fierce competition and an unfavorable economic situation.

### **3.2. Strategic position in HIP Petrohemija**

Analysis of the leadership situation itself is not sufficient to indicate the specific situation of the company, and the direction of its further development. We will therefore continue our analysis with strategic management models. This will be the ground for validating the chosen strategy for Petrohemija. Previously, Petrohemija had two different strategic options. One is merging with NIS; the other one is an independent development of Petrohemija. Selection of the necessary investments are not so divergent, the main difference is the capacity of a future polypropylene plant.

SWOT analysis (see [11]) integrates the key elements of the business environment and the strategic capabilities of the organization that likely could affect the strategic development. The goal is to

identify which are the key strengths and weaknesses relevant to the company, and the company's ability in exploiting and overcoming the opportunities and threats in the environment. Petrohemija greatest strength is the quality of products. Customers are loyal to Petrohemija only because of that; some large customers consider this product as the best in Europe, and perhaps in the world. This allows them some extra money, when offered plastic from Petrohemija with cheaper plastic together, this mix provides a more favorable final price. This quality will be available since Serbia joins the EU with its strict environmental regulations, but this is on the horizon in the medium term. As other strengths we recognize trained work force, possession of REACH and ISO certification, technical connection with the NIS, as the main supplier, high exports, high capacity utilization of polyethylene plants, and commercial knowledge of the market. As the main weakness we emphasize its financial weakness as primarily, caused by damage from the over a decade ago bombing. Business which was based on the well below average use of capacity, and the above average workforce, led to accumulation of huge losses. Other weaknesses include the age of factories, the low use of ethylene plant, virgin naphtha supply problems, indebtedness, lack of investment and working capital, the unresolved status of privatization, the limited range of plastic products, which is based only on basic polyethylene, high operating costs, and the pollutant image of Petrohemija. Closing the plants of competitions and thus reduced competition in the market, as well as the availability of cheaper equipments, but also the whole factories, both new and used, we see as the best opportunities for survival and development of Petrohemija. Opportunities include also the relatively lower use of plastic in the Balkan markets and thus the possibility of growing demand in the future in those markets, good infrastructure connections to markets using the Danube river, rail and road networks, positioned on the route of the future PEOP oil pipeline, tax incentives that Government gives to the new investors, and the possible construction of a new PP plant. As the main threats we can emphasis new ethane technology, impact of world crisis on the business, competition from the East, and a large influence of the state as the main shareholder in the company. Other threats which we recognize are the problem of supply of raw materials, the monopoly of NIS, strong competition in the domestic market, and increased environmental awareness of the society.

We will use the data from the SWOT analysis in order to construct TOWS matrix (Table 4) and to generate alternative SO, WO, ST and WT strategies and tactics. We argue that the TOWS analysis generally crystallizes two possible strategic approaches. Both are based on new investments in PP and PE, but the difference is in involved partners. The SO and WO variants urge that desirable partner is an investor, strategic partner with expertise in the market where Petrohemija sells its products. In ST and WT variants desirable partner is NIS GazpromNeft. We urge that the first strategy, which is based on internal strengths and the external opportunities, is more realistic and better for Petrohemija, and those findings we will demonstrate by using the sophisticated models of strategic analysis.

We have listed two opposite directions of growth and development of Petrohemija, which burden the company even today, although the only one of them is feasible after the sale of NIS. The first one involves vertical integration and mergers backward to the supplier of raw material NIS. This strategy includes the PP (polypropylene) factory of high capacity, unmatched with the current production capabilities. The second one includes the privatization and the PP plant in accordance with current production capabilities. What is not obvious at a first glance is that this approach also assumes vertical integration, but forward with the customer, because it is unlikely that a one petrochemical company buy another, not profitable, indebted and located on a small and less attractive market. To identify the strategic direction for development the suitable analysis is the Ansoff box or matrix or the product development and market matrix.

Ansoff matrix is based on the assumption (see [12]) that the developments of new products and new markets require different strategies from already used. The current position requires from Petrohemija to continue with the market penetration of its products, which can be achieved especially in the domestic market (Fig. 6). Building PP Plant in any case will lead to a new portfolio of products and cause the product development as a new development strategy (light blue arrow in Fig. 6). However, only a vertical integration forward, with a strategic partner that has a strong market position in the global market, can contribute to the development strategy of market development (dark blue arrows in Fig. 6), which for a company with high quality product that is not present outside the

European market can be very profitable. This strategy, together with the strategy of product development, could cause a much better and more stable position of Petrohemija. This conclusion is identical to our opinion on the basis of the TOWS matrix that the best partner for Petrohemija is a strategic investor with expertise in the broader market of petrochemical products.

**Table 4: TOWS matrix for Petrohemija and chosen strategies**

		Petrohemija	
		Unutrašnje snage Petrohemije (S)	Unutrašnje slabosti Petrohemije (W)
		<ul style="list-style-type: none"> <li>•visok kvalitet proizvoda</li> <li>•utrenirana radna snaga</li> <li>•ISO/REACH sertifikati</li> <li>•tehnička povezanost sa glavnim dobavljačem</li> <li>•visok stepen izvoza</li> <li>•visok stepen korišćenja fabrika polietilena</li> <li>•komercijalno poznavanje tržišta</li> </ul>	<ul style="list-style-type: none"> <li>•posledice bombardovanja</li> <li>•starost fabrika</li> <li>•nizak stepen korišćenja fabrike etilena</li> <li>•problem snabdevanja sirovim benzinom</li> <li>•zaduženost i visoki troškovi</li> <li>•nedostatak investicionih i obrtnih sredstava</li> <li>•neršen status privatizacije</li> <li>•ograničen asortiman (PE)</li> <li>•zagađivač</li> </ul>
		SO strategije	WO strategije
Okruženje Petrohemije	Smanje Petrohemije u okruženju (O)	<ul style="list-style-type: none"> <li>•smanjena konkurencija zbog ekonomske krize</li> <li>•mogućnost nabavke jeftinije opreme</li> <li>•trend rasta potrošnje plastike na Balkanu</li> <li>•infrastrukturalna povezanost – Dunav, Železnica, putevi</li> <li>•na trasi budućeg naftovoda PEOP</li> <li>•poretke olakšice za investitore</li> <li>•izgradnja novog PP postrojenja</li> </ul>	<ul style="list-style-type: none"> <li>•Nabaviti novu opremu i iskoristiti radnu snagu.</li> <li>•Povećati izvoz na balkanska tržišta.</li> <li>•Nabaviti novo PP postrojenje u saradnji sa investitorom koga će privući investicione olakšice.</li> <li>•Održavati i poboljšavati visok kvalitet proizvoda.</li> </ul>
	Pretjne Petrohemiji iz okruženja (T)	<ul style="list-style-type: none"> <li>•nove etanske tehnologije</li> <li>•ekonomska kriza</li> <li>•konkurencija sa Istoka</li> <li>•veliki uticaj države</li> <li>•problem nabavke sirovina</li> <li>•monopol NIS-a</li> <li>•konkurencija na domaćem tržištu</li> <li>•povećana ekološka svest</li> </ul>	<ul style="list-style-type: none"> <li>•Prepuštiti NIS-u monopol i nad Petrohemijom i obezbediti sirovinsku bazu.</li> <li>•Povećati prisustvo na domaćem tržištu.</li> <li>•Tražiti od države podizanje carinskih barijera i protekcionističkih mera za plastiku sa Istoka.</li> </ul>
		ST strategije	WT strategije
		<ul style="list-style-type: none"> <li>•Napunosti domaća tržište.</li> <li>•Obustaviti poslovanje za vreme trajanja krize.</li> <li>•Preći na etansku tehnologiju posle privatizacije.</li> <li>•Pokloniti Petrohemiju NIS-u.</li> <li>•Stečaj zbog rezultata poslovanja.</li> <li>•Zatvaranje fabrike zbog zagađenja.</li> </ul>	
<p><b>SINTETIZOVANE STRATEGIJE:</b></p> <p>1. Investicije u polietilen (PE) i polipropilen (PP), investitor strateški partner sa ekspertizom na tržištu.</p> <p>2. Investicije u polietilen (PE) i polipropilen (PP), investitor država kao većinski partner u saradnji sa NIS-om.</p>			

In his first book (see [13]), Porter introduced the five forces. The essence of Porter's approach is to formulate a strategy for companies in relation to the ambience. A key aspect of that ambience is the industry. He identifies five competitive forces: threat of new entrants, threat of substitutes, bargaining power of buyers, bargaining power of suppliers and rivalry among existing competitors in the industry. Each of these five forces is composed of individual sub-force, on which we can analyze the intensity of force in any particular case, as we can in the Petrohemija case (Fig. 7).

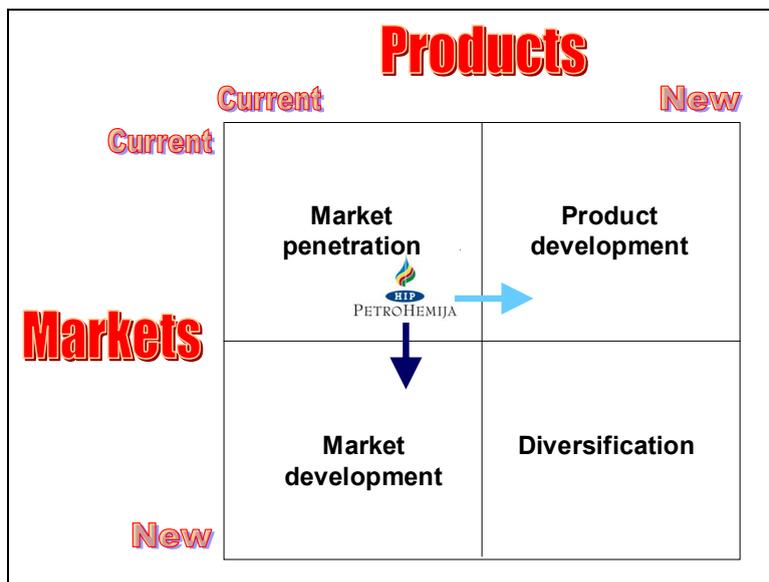
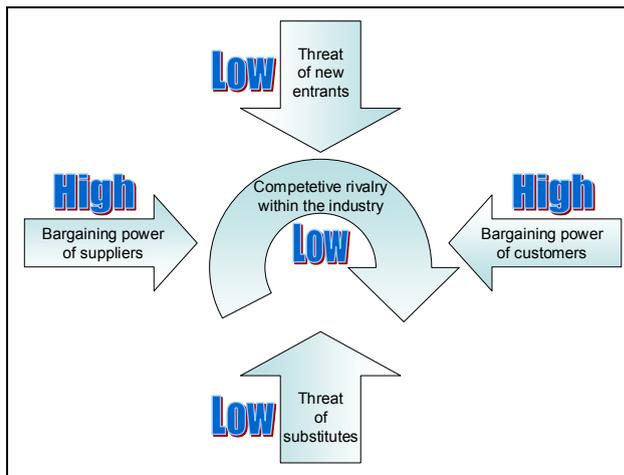


Figure 6: The Ansoff box and possible strategies for Petrohemija

Petrohemija is the only producer of petrochemicals in Serbia and one of four in the region (along with Croatia, Romania and Bulgaria, but because of world crisis the last two were closed). We can say based on that, that the rivalry of existing competitors in the industry is low. It is also a low risk of new companies to enter the market due to high investment costs and longer term for building plants. Plastic granules can not substitute with another (e.g. polyethylene with polypropylene or polystyrene) due to the peculiarity of their technical specifications and production use, and this force is of little influence. The geographic position of Petrohemija impedes the supply of raw materials and interconnections with NIS in the procurement of virgin naphtha, the main raw material, which generates 60% of total costs. Therefore, bargaining power of suppliers is high. Although the fact that companies used to produce plastic granules are small businesses, mostly one-man-show entrepreneurial workshops and because the machines are calibrated to the specific compounds, all that could lead to the conclusion that the bargaining power of buyers is low. Hence the observation of whole sale market and trends leads us to conclude that this is not true. Distributors, which are the prime competitors in the sales market and which participated in the sale of Petrohemija with 50%, have the financial

ability and business influence on the final customers in constant introduction of new types of polymers, which Petrohemija does not produce and their actions can disrupt the market position of Petrohemija, so this leads us to the conclusion that the bargaining power of customers is high.



**Figure 7: Porter's Five forces in Petrohemija**

In his second book, Porter (see [14]) deeps its outside-in approach and he introduces the value chain. The value chain is a systematic way of examining all the activities of a company. Moreover, it is not just a list of activities; it is the view of interaction of these activities with those of other companies in a whole value chain: suppliers, distributors and customers, in order to gain competitive advantage. Porter is dividing all these activities into primary and secondary. Value chain is an excellent analyzing tool only if all participants in the chain of the competitive environment are the subject of analysis.

Petrohemija, a company that seeks recovery and development, will not arrive anywhere without performing analysis of its entire value chain in order to reveal where the profit pool in the chain is. Regarding refinery, the supplier in the value chain, virgin naphtha, which is the main raw material for petrochemical industry, is just the intermediate phase and the basis for a final product – gasoline and greater profit from the customers. Hence the interest of refinery is to improve technology in order to maximize the internal consumption of

virgin naphtha, which is in contradiction with the desire of Petrohemija to provide and expand its resource base. The core marketing philosophy of business of refinery and Petrohemija is different. Refineries are suppliers to gasoline stations and they adjust their production according to the number of pumps that control or supply. Petrohemija, on the other hand, sell its products in a competitive market and must invest more in marketing and sales activities. So, in the procurement of virgin naphtha we can't see the profit pool. End users require a continuing trend of cheap plastic products in the market and competition between many small producers in the market is very strong, which implies a lower rate of profit, and even here there is not a source of profit in the value chain. Distributors, large international companies, which are in constant growth and development, are one part of the chain that generates the greatest profits. The reason we can find in their financial strength, agility and understanding of the market. They constantly discover new ways to use plastic, and such feedback affects the plastic manufacturers to introduce new technologies. Their expert knowledge of the market would allow Petrohemija excellent synergy in the integration, which is our chosen TOWS strategy, because Petrohemija could let marketing and sales to distributor, who is much stronger in this area of expertise, and further to focus on the production and to ensure the long-term quality of products. This strategy is also cost effective as it involves the redundancy of labor from those activities that are not essential in order to focus on what should be the core activities for Petrohemija, as production, research and development.

#### **4. ANALYSIS OF RESULTS AND CONCLUDING REMARKS**

The results give us a general picture of the situation in Petrohemija and desirable path of strategic development. After the sanctions, when Petrohemija lost significant technological connections with the Romanian petrochemical plant and after the bombing, when Petrohemija lost the significant part of capacity, the ethylene plant could not work profitably. The privatization of NIS without Petrohemija caused that the chance is lost for development of Petrohemija in the oil industry. In this period its debts were growing, and more than twice exceeded the amount of capital. Also, the activities regarding the privatization were minor.

TOWS matrix put us to chose between two strategies, first, what was our choice, investment in PE and PP by the strategic investor who is forward in the value chain, with expertise in the sales market, and second, which we claim that will not contribute to development of Petrohemija, investment in PE and PP by the state and/or NIS and backward integration in the value chain e.g. with the supplier. Five forces model shows that the company in its strategically thinking must take into account the very high bargaining power of suppliers and buyers. Petrohemija will have an opportunity of significant growth and development in strategic alliance with major distributors, according to the value chain analysis. In this (small) circle of its partners Petrohemija may find the prospective buyer, who also has the financial capacity to invest in new plants. It is obvious that market trends and capacity of ethylene plant require investment in PE and PP, and that this investment should start immediately. Ansoff matrix is evidence that privatization by vertical integration in forward and investment in PP give more opportunities, because it is focused on product development and market development, both. All new actions toward Petrohemija connection with NIS are bound to fail because no one would gain additional value by association. Unfortunately, a very good time to invest in the midst of the economic crisis, when prices have fallen for new and used equipment, was lost. All analysis leads to the conclusion that our elected TOWS strategy is a winning strategy for petrochemical industry in Serbia today.

Finally we can conclude that the strategy of leadership team from Petrohemija case study was positive and that it was possible to expect that the proposed actions in Petrohemija will end from the loss to the profit. The reason for the failure thus ground not in the proposed strategic solutions, but to the shortcomings of leadership approach, which caused that changes never occur. Leadership and change are synonymous, but the grouping of unions and the Government on the opposite side from the leading vision of change, which the Stakeholder matrix shows us, contributed that the leadership team finds itself in a hopeless situation and to practice style that is leaderless. The equation of changes and corporate culture show us that culture was strongly against the change, which is another proof that in Petrohemija was not possible to implement organizational changes. Stages of change show us that the leadership team was unsuccessful in unfreezing the status quo. It is obvious that the existing culture and

behavior patterns in particular have managed the failure of the leadership team, as a new vision and change in general have not been implemented in a new culture, which was “mission impossible” of the leadership team who was put into a leaderless position.

If the Serbian Government, as majority owner of Petrohemija, wants changes in Petrohemija, strategy "how" is given, but without leadership will be unattainable. Although in Serbia ungrateful is to deal with forecasts in the economy because of the irrational behavior of the Government in the market, however, we can concluded that Petrohemija with a high level of debts and mortgages that burdened her current business is likely to go bankruptcy. Where the Government, banks and Russian partner should decide together on the fate of Petrohemija, makes the exit from the present situation more complex, and therefore is likely that this situation end up in bankruptcy. Only privatization of Petrohemija, in the manner demonstrated in the preceding analysis, from the partner – a large distributor, even for a dime, with the forgiveness of all debts, and with the guarantee of investment, may save the company. Joint venture and strategic alliance with the big buyer would be the best way, but now the Government is no longer the sole negotiator, and the question is whether all parties could come to an acceptable solution at all, if they have (and they have) different interests. Selling for a dime for state budget in real terms would be a negative number, but as the amount of debts increases daily, it is necessary to accelerate the privatization of Petrohemija. Although we do not want to deal with the forecasts, we do not see that present conditions are suitable for privatization of Petrohemija and we assume that bankruptcy is almost certainly the only solution.

Presented case study showed us that we had a leadership team eager for change and a winning strategy for achieving these changes. However, between these two was resistance to change, which was rooted in organizational culture. Thus we urge that the success of leaders in creating change is bounded with the triangle management - organizational culture - changes. We conclude that the organizational culture is the primary obstacle to change. The leaders' failure in changing the ossified culture, regardless of whether it is caused by internal or external factors, will end up in failure in changes, and such leadership will proclaimed as unsuccessful. We agree that leadership role should be primary, but also that this role is not the exclusive in

forcing changes. However, what we see as certain is that the changes in the future will be even more pronounced and less certain. Therefore, the acceptance of leadership approach is an imperative in any modern business system. The sooner we accept this fact, it will be better for all of us.

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## **BANK CREDIT RISKS AND BAZEL PROCEDURES**

### **Abstract:**

*We analyze importance of the modern business concept of managing interest rate risk is one of the key modes in managing assets and liabilities, which way the banks protect bank capital and incomes from the interest rate risk with recomposing balancing and out-of-balancing performances.*

*In the process of managing interest rate risk, in which the cognition and forms of interest rate risk are equally important. Basel Committee on Banking Supervision has adopted and recommended to the certain national supervisors to apply procedures, which banks should use at managing interest rate risk in their business operations.*

**Key words:** *bank, interest rate, interest rate risk, management interest rate risk, ALM, interest rate sensitive gap, duration gap, hedging, Basel II, Capital adequacy, principles of management interest risk, trading book, bank book, implementation of Basel agreement, ALCO, responsibility, information dissemination, publishing interest rate risk.*

### **Introduction**

By this we present the need for banks for the ability to determine certain occasions at financial markets and recognize them as interest rate risk, which must be managed within a certain period of time. Bearing this in mind, in its operations, liquidity and safety principles in order to preserve capital and cash flows, it is necessary for the bank to have interest rate risk management system, to which it is exposed. For these reasons, arises the need for understanding and using modern methods of managing interest rate risk, with the aim of the increasingly complex and dynamic environment to increase economic value and profitability.

The process of globalization brings with it major changes in the financial field. Banks are transformed into new forms of financial institutions globally. Hence the question of risk sets as one of the most important issues in banking.

Basel "Committee for Banking Supervision" adopted and recommended the application of certain national supervisor's procedures that banks should use in managing interest rate risk in its operations. An example is a specific banking system of Bosnia and Herzegovina, which is in the process of transition, and where interest rate risk management is carried out in accordance with the Basel Core procedures.

Compliance becomes a primary need, when you take into account the fact that, as countries in the region and Serbia, daily more difficult integration processes in order to become part of the European Union.

### **The role of banks in the financial market**

The Bank is one of the most important subjects of financial markets and the overall system of financing of the economy as a whole (whether it is on direct lending, either through the financial markets through securities).

By entering the financial markets, commercial banks are gradually changing the structure of its activities. There was a very promising innovation that will be very important, and that consists in the securitization of certain standard tasks - such as mortgage loans. Based on the securitization banks make emissions of its bonds, which are then sold to institutional investors. Supporting the issue of securities by companies, in cases when they do not sell enough of them through the primary program, the bank loan guarantees the residual amount to cover the issuer's financial program. Although the bonds that the banks are buying are considerably different from bank loans, however, both financial instruments have in common that imply a certain period and interest. Therefore, bonds and loans are the basic concept of credit.<sup>153</sup>

Commercial banks are also gradually more and more to the off-balance sheet activities, which include traditional off-balance sheet activities (credit guarantees, letters of credit, foreign exchange transactions, etc.), and newer forms of activity in the form of financial derivatives such as futures, options, swaps and other.

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<sup>153</sup>Cirovic, Milutin. 2006. *Banking*. Belgrade: European Center for Peace and Development.

### **Interest rate mechanism**

One of the most important factors in the economy of each country is of interest, or interest rate, because it is an instrument which determines the cost of capital. For many years, in economic theory and practice of discussing the nature and role of interest in the economic system, in relation to this there are generally two points of views. On the one hand it is considered that the interest rate that is higher than inflation has positive and stabilizing effect on economic trends in the state, on the other hand there is the view that in unstable economies, high interest rates encourage cost inflation, and that task even more economic instability, and it is therefore necessary policy of cheap money to encourage the production and economic development.

Interest is the price for the temporary abandonment of capital, and is accounted for by the due date claims.<sup>154</sup> The interest rate is basically the price of using the Loan capital, they are mostly paid out of surplus value, which embodies the loan capital and is a regular part of the gross profits, which is regularly smaller than Loan capital.

The interest rate is the instrument of a balance between savings and capital supply to the demand of financial resources to absorb savings established by the real investors, income distribution on consumption and investment, allocation of financial resources and capital mobility.

Modern theories about the interest rate does not believe that countries with economy in a balance of supply and demand of goods, that are nowhere to full employment and capacity utilization, that money also has other roles in addition to payments, which means that it is not neutral, that there is no automaticity in the establishment of equilibrium price, interest, savings, investments and so on, and it is necessary to regulate and predict interest rates, there is a real and nominal interest rate and central bank policy transmission and discount policy can act as the monetary, and on economic trends.

There are several ways to determine interest rates, of which most often are: yield to maturity, current yield and yield-based discount.

The fact is that neither in theory nor in practice, there is no single interest rate and that the use of different interest rates. In the

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<sup>154</sup> [www.premiumsoft.co.yu./?opt=dictionari&id=313547](http://www.premiumsoft.co.yu./?opt=dictionari&id=313547)

process of shaping the interest rate the factors of time and risk are taken into account and as corrective elements may appear in the stability of money (inflation, deflation) and the administrative influence of the state.

From the level of interest rates depend on the business decisions of companies, macroeconomic developments, and private decisions affecting the quality of lives of many people. Although the interest rate can autonomously determine the central bank (we often have limited interest rates), it is usually free to establish the relationship of supply and demand.

### **Range of bank financial risks**

Pricing of bank loans cannot be explained without pointing out key differences in the market of bank loans compared to the standard market goods. Promises given to borrowers when the loan repayment is concerned include the likelihood of return that is difficult to determine objectively. Therefore the specificity of bank loans exists.

It is common and natural for banks to perform the classification of potential borrowers into different groups, as expected repayment depends on the degree of risk the project. Before loan approval and determination of interest rates, the bank has to assess the current risks in the project. Those potential customers, who are classified as first-class, makes the "Prime Rate" interest rate, which is the minimum for these users, while for higher-risk group the risk premium charged above the Prime Rate. Empirical study shows that the efficient allocation of credit in the economy just depends on the accuracy of the classification systems Loan.<sup>155</sup>

A large number of risks in the banking world, each of which affects the profitability, raise the importance of risk as a problem in the business of each bank. For these reasons, different types of risks must be carefully defined, studied and accurately determined. This process is greatly improved by legislation, which defined the basic principles and rules that apply to different types of risk. Knowledge of risk in banking, where each bank is exposed, and their accurate definition, is the basis for every business decision in risk management and further management decisions in the bank.

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<sup>155</sup> Hadžić, Miroljub. 2007. *Banking*. Belgrade: Univerzitet Singidunum Beograd.

The Risk<sup>156</sup> is defined as possibility of deviation from the expected outcome<sup>157</sup>. Although this definition of risk could be accepted by most people, there is no single accepted definition of risk, much less how it should be measured.<sup>158</sup>

Association of risk with the probability of deviations, the first term is key determinant of risk, which means that the risk can be expressed as a probability that ranges from 0 to 100 percent, which is not definitive, nor is it impossible. From this definition cannot be concluded that the probability must be quantified, only that it should exist.

Existing definitions of risk themselves do not explain the dimensions of measuring risk, but most of the degree of risk associated with the probability of events and evaluate the probability of outcomes based on past experience, intuition, market studies, or otherwise. However, this should not be taken as definitive and accurate, given that the risk measures the probability of deviations from expected values, not the probability of occurrence of events.

The concept of risk must differ from the suspense, given that uncertainty is the inability or lack of knowledge in predicting the possible outcomes will occur. Lack of knowledge directly increases the uncertainty and subjectivity in the assessment. Conversely, information and knowledge reduces uncertainty, increasing objectivity attitudes and quality of decision-making. The uncertainty cannot be measured by economic criteria. When all outcomes are equally likely, the system performs the state of chaos. Chaos is measured by entropy, which exceeds the limits of the exploration of risk.

The financial theory of risk sharing in the daily operations of banks with systemic and non-systemic risks, which are practically the total risk to which each bank is exposed.

As one of the risks which the bank accepts in its business and financial risk, which reflects the likelihood of future net income, as the yield on shares or portfolios that are associated with changes in the yield on the market as a whole.

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<sup>156</sup> Riscum (lat.) - possible outcome of events.

<sup>157</sup> Gallati, Reto. 2003. *Risk Management and Capital Adequacy*. United USA: MC Graw-Hill.

<sup>158</sup> Van Horne, C. James., Wachowicz, M. John. Jr. 2002. *Fundamentals of Financial Management*, Zagreb: Mate.

There is more sharing of financial risk, a widely accepted classification includes credit risk, liquidity risk, interest rate risk, currency risk and operational risk.<sup>159</sup>

### **Defining the concept and forms of interest rate risk**

Impact of interest rate risk on the bank can be traced through the impact on the banking book and trading book. Bank book classifies and records all the traditional activities of banks which partly overlap with the investment business<sup>160</sup> while the trading book bank records all transactions carried out on the market. This implies that the interest rate can be divided into interest rate risk, income and interest rate risk contained in the commercial bank transactions.

Basic measure of interest rate risk is the ratio between items of assets, which are sensitive to changing interest rates, and liabilities items, which are sensitive to these changes. Coefficient may be lower or higher than one, reflecting the banks willingness to accept risk versus forecasts of future movements in market interest rates, especially during major fluctuations in market interest rates. In order to minimize exposure to interest rate risk of banks, resort restructuring the balance sheet assets and liabilities sensitive to interest rates, so that the coefficient of sensitivity to interest rate tends to unit one.

An effective process of interest-rate risk in the bank requires knowledge of risk sources, which are in fact the primary forms of this risks the bank is exposed to. The most common forms of interest rate risk are: the risk of changes in prices, basis risk, yield curve risk and options risk<sup>161</sup>.

Changes in interest rates in the bank create a particular effect on deposits and loans, the rate securities, the market value of the bank and the net interest margin.<sup>162</sup>

### **Interest rate risk management in bank balance**

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<sup>159</sup> [www.iem.bg.ac.yu/BBA/Master/06-07/poslediploma\\_inf0607.htm](http://www.iem.bg.ac.yu/BBA/Master/06-07/poslediploma_inf0607.htm)

<sup>160</sup> Bessis, Joel. 2002. *Risk Management in Banking*. New York: John Wiley&Sons, Inc.

<sup>161</sup> Kandžija, Vinko., Zivko, Igor. 2004. *Policy of the Bank. Rijeka-Mostar: Mostar University Faculty of Economics, University of Mostar, Faculty of Economics, University of Rijeka.*

<sup>162</sup> Zivko, Igor. 2006. *Interest rate risk in the banking industry - sources and effects. Zagreb: Economic Thought and Practice, br.2*

By managing interest rate risk in its balance sheet, bank management is able to create a flexible structure and balance that is so easily adapt to any change in interest rates on financial market.

As in other businesses, its balance sheet has two sides that remain in computational equilibrium. The two basic financial statements or balance in the bank: balance sheet (statement of financial condition) and income statement (statement of income and expenditure).

For each bank is of the great importance maintaining the balance of equilibrium in both the short and long term. Bank balance is considered balanced if the futures and currency-balanced values of assets and liabilities. Maturity matches <sup>163</sup> the balance sheet guarantees covering of the risk of illiquidity, and currency adjustment guarantees covering the currency risk. When the liquid reserve covers the risk of an untimely payment of obligations, then we say that the bank balance is fundamentally balanced.

Income Statement Balance Sheet is usually preceded by the bank and it is complementary, if treated the same period. Both are theoretically present balance at any time and the result of the changes in the business activities of the bank. The preparation of the income statement, from the perspective of bank management, aims to meet the management structure with the results achieved in a certain period of time. The best definition of banks is one that relies on its three dimensions:

- The return on investment (ROA),
- The return on equity (ROE),
- Earnings per chares (EPS) - in the absence of this, net income is an acceptable substitute<sup>164</sup>.

In order to achieve quality management assets and liabilities, it is necessary to define the banks strategic plan, implementation and control of banking processes, quality and liquidity of assets and liabilities. Taking into consideration that the management of assets

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<sup>163</sup>Banks have a different grouping of assets and liabilities maturity structure. Periods grouping of assets and liabilities that are commonly used in banks, are: a) 30 days, b) a period of 30-90 days, c) a period of 90-365 days, d) a period of 1-5 years and is ) period over 5 years.

<sup>164</sup>Cates, C David. 1997. *How Banks Make Money*, in book: *The Financial Services Handbook-Executive Insights and Solutions*. New York: Eileen M. Friars and Robert N. Gogel, John Wiley&Sons.

and liabilities included in the factor underlying the growth and involvement of bank funds, it is the financial heart of the bank<sup>165</sup>.

As a result of quality management assets and liabilities should be the achievement of stable and continuously growing net interest margin as the difference between lending and deposit rates, putting it in relation to average interest bearing assets. This is certainly achieved only if the optimum combination of investments (assets), resources (liabilities) and financial risk of bank. Asset and liability management is considered separately, only for analytical reasons, because their management today simultaneously, given the existence of a cause-effect relationships between assets and liabilities management.

### **Methods of managing interest rate risk**

When it comes to interest rate risk, one of the most important goals is to protect the profits of the impact of volatility in interest rates, no matter in which direction these changes start. With that in mind, bank management must realize the expected profit on a stable level. To achieve profitable operations at an acceptable risk without jeopardizing the liquidity of the business, security and stability of banks, management must take into account the assets and liabilities that are most sensitive to changes in interest rates. On the assets in the balance sheet are loans and investments, and deposits and loans on the liabilities side. Assets and liabilities should be viewed as an integral whole of assets and liabilities that contribute to profitability in the bank. In order to protect profits from adverse changes in interest rates, shareholders seeking to net interest margin remains fixed, as the main indicator of earnings on assets that bring interests. It is calculated as follows:

***Net - interest margin = (Interest income - interest expenses) / average assets that bring interests***

The bank has its own business policies focus on maintaining a lasting and stable net interest margin and its possible increase. The main objective of the banks management is to control the net interest margin, but it also reflects the management of activities related to maximize the market value of the bank. If, by chance, there is a falling

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<sup>165</sup> Dill, A. Arnold. 1998. *The Bankers*. Tools and Techniques to Implement Asset/Liability Management. Illinois: William H. Baughn, Thomas I Storrs and Charls E. Walker, Dow Jones-Irwin

net interest margins, the analysis and undertaking business activities in the direction of increase in interest income must be immediately performed, control and reducing of interest costs, and adjustment of their height with the movement of interest bearing assets. In an effort to achieve the objectives, the management of banks mostly in ruling the interest rate risk use:

- Gap analysis, which includes gap of the assets with interest rates (gap balancing, finding gap model) and divide the life of the bank (duration gap, duration) and

- Simulation models.

In its operations, the bank will items with interest rates with assets and liabilities classified by maturity dates, the date of the Balance Sheet, or the dates when the possible change in the rate of interest on certain positions, and calculate the gap. Banks today use computer techniques to the assets and liabilities classified as past due or subject to the re-establishment of prices, during the analyzed period.

Some banks have now introduced the principle of weighting gap sensitive to interest rates, which takes into account the tendency of mutual fluctuations in interest rates in terms of dynamics and the amount and in relation to the growth and decline in business transactions. For balance sheet assets is very characteristic that, according to different types of the assets, interest rates change the amount and rate of change is not the case for interest rates liabilities. This phenomenon is called the basic risk.

In the analysis of interest rate risk, in addition to the importance of separation of balance sheet by maturity, where approximately intersect the cash flows of short-term time frames structuring the maturity (protecting the net interest margin), is very important and characteristic analysis of cash flow. In doing the analysis we have in mind that loans and liabilities of the bank have different plans to repay amortization-payment of principal, as well as different kinds of payment and collection of interest. Disparity that results in these differences, created a basis for the gap of the duration of the bank life (*duration gap*), which expresses the difference in maturities certain financial assets and liabilities. In this way created conditions, volatility in interest rates could jeopardize the banks net worth, because if the net interest margin is being protected from interest rate risk, it does not mean that the net value of the bank is

protected from loss. To protect themselves from these negative consequences, it is necessary to implement and use the gap method of controlling the duration of the bank life, or the duration model, which has different capabilities in managing a bank.

The Duration is a measure of time value and maturity of all proceeds from interest bearing assets and liabilities, outlays by interests-sensitive liabilities. The duration is, in fact, the model of the life of balance positions and it is based on an analysis of the weighted average maturities investments and liabilities.

The duration is defined as the ratio of present value of the sum of all expected cash inflows from individual securities, or the total weighted portfolio maturity, the market value of securities, or the total portfolio.

When in practice we have a longer life gap of the bank, this means that the net value of bank is more sensitive to changes in market interest rates.

If the gap is a positive life with a coordinated bank leverage, parallel changes in the level of interest rates will lead to changes in the value of liabilities less (higher or lower) than the value of assets. In this case, rising interest rates reduce the value of assets above the value of liabilities, thereby reducing the net value of the Bank (market value). Fall of interest rates, in this version, is caused by large changes in value of growing in assets than liabilities, which are also rising, but the changes in net worth positive bank.

If the situation were reversed, i.e. if there is negative gap life bank, with the concerted leverage, then the parallel changes in interest rates lead to higher valuation of liabilities than in assets. This means that a fall in interest rates cause increasing the value of liabilities more than assets, when declining net worth of banks, while rising interest rates cause the value of liabilities decreasing faster than the value of assets, increasing in this way the net value of banks.

The simulation models are used in the ALM concept, in order to determine possible effects on bank risk and return, at selected different scenarios in which varying levels of interest rates. Interest rate risk management, analysis interest-sensitive gap and gap analysis of the duration, may provide for specific situations in the future and how the level changes in interest rates affect the banks operations, cash flows and economic value of bank. Given that some of the balance sheet positions in the interest bearing assets and liabilities,

and the other with a variable interest rate, and that there is a discrepancy, especially at shorter periods, between the calculation and collection of interest, the assets and liabilities are classified in risk groups, even interest income does not go always with the full balance, the interest rates change differently and unpredictably, banks using modern information technologies are increasingly using simulation models for interest rate risk management. Based on the methodology of the income statement, which means that any assets and liabilities, other than there have data on the maturity date, amount and type of interest rates, risk classification, etc., which in turn permits the calculation of interest and obtaining other elements to create balance success for the chosen period with the new assumptions. The results obtained are used for planning and implementation of the banks business policy.

If the estimated effect of interest rates on banks income statement and the cash flows arising from existing balance sheet and off balance sheet items, such estimates are called static simulation. In addition to these are used, dynamic simulation, which are more complex than previous ones, because in addition to the existing balance sheet and off balance sheet items into account the anticipated market interest rates, a strategy the bank interest rate policy, the expected behavior of bank customers, business policy, the sources and investments, and other important factors. Dynamic simulations, as closely as possible, try to predict future performance of the bank, so that the models include all relevant information and factors.

### **Hedging the interest rate risk**

After determining the sensitivity of its balance sheet, the risk of changes in interest rates, using the method of divide and simulation, it is necessary to use adequate tools to protect against risks to interest rates. For this purpose we use the hedging methods, which represent an innovative solution to protect the bank from the risk of changes in interest rates. Hedging means protection, or enclosure, and in this context relativization of interest rate risk, assuming risk coverage otherwise the business operation. The concept of hedging includes protection against loss of their own opposite transactions<sup>166</sup>. The most

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<sup>166</sup> Vunjak, M. Nenad., Curcic, N. Uros., Kovacevic, D. Ljubomir. 2008. *Corporate and investment banking. Subotica: Ekonomski fakultet Subotica.*

commonly used hedging instruments are financial instruments created as derivatives whose value is derived from the value of some other underlying assets shown at their base. Financial derivatives, or derivative securities do not express any debtor-creditor or equity related, but represent the kind of conditional rights to other forms of financial assets, such as interest rate. They are, therefore, contractual instrument between the parties other than the original issuers of securities.

The most widespread forms of financial derivatives used to hedge changes in interest rates are forwards, futures, options and interest rate swaps, which make up the group of linear interest contracts and interest rate ceilings, floors and collars, which are of interest to the group of non-linear contracts. Listed derivatives used to manage interest rate risk banks, to protect the profitability of the bank of the change in the level of interest rates. Banks are the biggest users of derivatives, given the large exposure to interest. The use of derivatives allows the separation of banks manage interest rate risk from other aims of the bank, and their usage depends on the size of banks, markets, financial derivatives, and the knowledge, skills and experience of employees in such jobs in the bank.

Financial derivatives are traded on regulated and OTC markets. The biggest markets in financial derivatives are as the London International Financial Futures and Option and Exchange (LIFFE), the Chicago Board Option Exchange and Chicago Mercantile Exchange. Smaller exchanges are France's Matif and Germany's Deutsche Terminbörse.

Forward is a contract for the sale or purchase of assets (interest rates, currencies, stocks, etc..) on a particular day in the future, at a price that is between two parties, buyer and seller, achieved at the time of the contract. Commonly used for delivery of bonds and foreign currency. Forward interest rates has certain characteristics, such as unambiguous debit instrument to be delivered in the future, then the quantity, price (interest rate) on the debit instrument at the time of delivery, and delivery date.

Interest rate futures occur in situations where the property is under the futures contract, when the securities, which carry a certain interest rate, guaranteeing the delivery of the property at a certain interest rate on the specified date in the future.

Futures hedging compared to interest rates, means that the bank take the opposite position in futures markets than those currently occupied by the cash.

In addition to futures, options are the oldest and most common financial derivatives. Have great importance as an instrument of hedging to protect against different types of risks in financial operations.

Options are the right but not obligation, to buy or sell the underlying instrument (assets, goods, securities, etc.) according to the forward agreed price, and at the same day in the future <sup>167</sup>. Unlike futures, here there is no obligation for both parties to the contract.

Interest rate swap is a contract whereby the participants undertake, during the term of the contract, pay an amount equal to one another, agreed interest rates, and thus benefit from reduced costs of mutual interest.

### **BASEL PROCEDURES AND INTEREST RATE RISK**

Oldest international financial institution, Bank for International Settlement (BIS) was founded in 1930. in Hague, by Young's plan, aimed at providing relief in the payment of German reparations after World War II. BIS headquarters today is in Basel, Switzerland.

Later, the main task of the BIS becomes a permanent improvement and coordinated cooperation among central banks and other institutions, in order to achieve financial and monetary stability and to mediate in the international settlement of European central banks. Bank for International Settlement was established as a bank of central banks and as such is owned by central banks, so that the use of its services intended only central banks and international organizations. Bank manages the Board of Directors of 17 members from the G-10.

The establishment and existence of the Committee on Banking Supervision is intended to define the basic standards of control, and based on experience gives recommendations, which will be in an appropriate manner, by authorized supervisors, applied through a detailed state or other regulations in the individual national systems.

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<sup>167</sup> Eric, D. Dejan. 2003. *Financial markets and instruments, Belgrade: Čigoja štampa.*

The last twenty years the Committee has paid the most attention to capital adequacy. It has been noted and expressed concern, the eighties, which is the capital ratios of large international banks deteriorate just as the international risks, particularly in relation to many indebted countries, began to grow. Within the Committee it was agreed on the need to pass an agreement that will strengthen the financial stability of the international banking system.

After comments on the consultation material, the first key document the Committee adopted in 1988, was the Capital accord, known as Basel I. In January 1996 the amendments relating to the regulation of market risks was adopted. The amendment became the first obligations of member countries on January 1998. The third key document adopted by the Basel Committees was in June 2004. known as Basel II, which rests on three pillars: minimum capital requirements, the process of supervisory oversight and market discipline.

Bank Capital, under the terms of Basel I in 1988 is divided into two types:

a) Primary capital (core capital - Tier 1), which includes common stock, surplus and undivided profits (retained earnings), preferred shares with no maturity date and minority interest in equity accounts, and identifiable intangible assets and other intangible assets (eg, purchased credit card). All banking systems, capital is the same and always explicitly shown in the published financial statements. Is crucial to calculate the rate of profit and the bank's ability to take risks and maintain a competitive position. The primary capital is considered the highest quality care.

b) Secondary capital and (extra capital I - Tier 2), which contains provisions for losses on loans and leasing, equity instruments for the obligatory legal claims, mandatory convertible claims, medium preference shares, equity securities and other long-term instruments that combine equity and receivables elements of equity. These elements of the balance sheet included in the bank's capital base, the purpose of assessing capital adequacy, and in addition they do not have the stability characteristics of capital. They include capital commitments that must be settled or which contain any compensation for future income, regardless of whether the revenue will be realized.

c) Secondary II capital (additional capital II - Tier 3) is a term that is the Basel Committee on Banking Supervision has introduced an

amendment for market risks in January 1996. year, and allowed banks, in accordance with the discretion of national legislators, to protect themselves from acts of exposure to market risks - by issuing short-term subordinated debt. This capital may only be used to cover the market risks arising from the actions and "interest rate-sensitive" trading instruments portfolio, currency risk and commodity risk. Secondary capital II shall, in accordance with the law, have a maturity of at least two years and shall be subject to the provisions governing the payment is not allowed, neither interest nor principal, if such payment affect the reduction of the total capital below the established minimum standards.

Capital adequacy ratio under Basel I is based on the principle that the level of capital a bank must be directly related to the profile of the bank's exposure. In addition, this approach has been focused on the possibility of involvement of other risks, even though the core focuses of the credit risk including sovereign risk.

The first ideas about the principles of banking supervision have emerged in order to define a single procedure, concerning the safety of banks. In this regard the Committee has defined a list of Core principles for effective banking supervision, which were formally adopted and published in 1997. List includes 25 principles that were enacted to promote the overall macroeconomic and financial stability. Respect of the adopted principle is required, if we want effective banking supervision.

Basel Core Principles (Basel I) are related to:

- a) Preconditions for effective banking supervision.
- b) Licensing and ownership structure.
- c) Prudential regulations and requirements.
- d) The method of continuous supervision.
- e) Information requirements of banks.
- f) The official authority of supervisors.
- g) International Banking.

## **Basel II**

According to the increased exposure of banks to other risks, such as market risk, which is recognized as a significant risk, it was first time to depart from the Basel I amendment in January 1996. In order to utilize the benefits of discipline, which imposed capital

requirements, the amendment added a specific capital reserve for market risk, as well as the introduction of VaR as a measure of market risk portfolio. This amendment is included in a series of quality standards for risk management, which apply to banks that their claims are based on the results of internal models.

Further development of financial markets and banking activities have led to the need of formulating a new methodological framework for the concept of security of each bank and banking system, particularly in the context of maintaining the stability of financial system. In June 1999 the first draft of the new standards (CP1) was published by the Basel Committee on Banking Supervision, in order to replace Basel I. In January 2001 much more detailed set of consultative documents was issued, the so-called "second consultative paper" (CP2). Its third consultative paper (CP3), following intensive consultations with the Bank, the Committee issued in April 2003., and the final text of the New Basel Capital Accord (Basel New Capital Accord), was released in June 2004. It has become valid in December 2006, including additional guidance in the material of the Committee - Implementation of Basel II to trading activities and the treatment of double default effects, from 2005.

The current version of Basel II, which is a compilation of elements from the Treaty from 1988., which are not audited, the Agreement on capital additions in 1996., as well as material from 2005., officially starts in developed countries on 01.01.2007.<sup>168</sup>, under the title „Basel II: International Convergence of Capital Measurement and Capital Standards, as revised framework, comprehensive version“.

New Basel Capital Accord is a new concept of calculating the capital adequacy of banks, thereby providing new rules for measuring and managing risks, the bank faces in its operations. As the capital base on growth of each bank and the way to protect against unexpected losses, Basel II defines what the value of equity capital sufficient to cover unexpected losses. Own capital, then, is a function of primary care from the risk of bank insolvency and its value must always be adapted to the risk exposure of banks. As such, the capital has a huge role in the development, growth and stability of each bank. It's too low value creates the possibility of incapacity absorption losses, the probability of bankruptcy and endangering the depositors,

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<sup>168</sup> Implementation of Basel II in the USA began in July 2007.

otherwise, too high capital prevents the realization of a high enough return on the source of funds, thereby jeopardizing the profitability.

The objectives of the New Basel Capital Accord are:

- establishment of closer links with the capital rules regulations of the risks that banks face, which results in strengthening security and stability of financial system;

- creating conditions to ensure competitive equality Banks;

- integrated approach to risk exposures (credit, market and operational risks);

- develop its approach to determining the appropriate capital adequacy, which reflect sensitivity to the degree of risk.

The basic feature of Basel II is the foundation on three basic pillars:

1. Minimum capital requirement (Pillar 1),

2. Supervisory process control (Pillar 2),

3. market discipline (Pillar 3).

### **Basel procedures in relation to the risks in banking**

The basic elements of risk management processes are: the Basel procedures, the identification, measurement, monitoring and control / risk reduction.

Among the remaining risks that handles Basel II are: market risk, legal risk, country risk and transfer risk, strategic risk, reputation risk.

The Basel Committee on Banking Supervision in 2004. adopted and recommended to national supervisors use the principles that banks have used to manage interest rate risk in its operations. At the same time, the principles should ensure a regulatory framework for monitoring interest rate risk management in banks. Fifteen principles of the Basel Committee on Banking Supervision is trying to determine the responsibility of management to manage interest rate risk in the bank, appropriate policies and management procedures and ways of measuring and informing the public about interest rate risk taken over by the bank.

a) Showing Interest Rate to the Risk Monitoring Committee and senior management.

b) The appropriate rules and procedures for risk management.

c) Measurement of risk monitoring and control functions.

- d) Internal control.
- e) Information for the competent authorities.
- f) Capital Adequacy.
- g) Publication of interest rate risk.
- h) Monitoring of interest rate risk in the accounting balance sheet items.

The first thirteen principles are intended to general use in managing interest rate risk of banks and are focused on the process of managing interest rate risk, which includes design of business strategy, knowledge assets, liabilities of banks and trading operations, and a system of internal control. To these principles imposes the need for the establishment and functioning of effective performance measurement, monitoring and controlling interest rate risk as a function of the system of risk management. The fourteenth and fifteenth principle intended national supervisors, in the direction of control interest rate risk in banks.

Those countries that choose to use Basel II, introduced the paper, the supervisor gives the bank for the freedom to actively participate in determining how to calculate the capital requirement. With these benefits come new responsibilities, as well for supervision as for banks. On the one hand, banks need to invest significant human and material resources in order to set a qualitatively higher level of risk management within their institutions; on the other hand, supervisors must also develop human and technological resources, in order to successfully oversee the systems that banks develop. The implementation process of exploiting the results of the dialogue between supervisors and banks, including the willingness of banks to implement Basel II regulations, analysis and supervisory ability, and overall impact on the selected approaches, related to the amount of capital.

Our country, which is a transitional state, there is still a mix of domestic and international banks of different size and complexity, in terms of risk management. With this in mind, the question of whether Basel II is generally relevant in our situation.

The solution for this situation is to offer several methodologies for calculating the risks associated with capital, where each in accordance with the degree of complexity or sophistication of risk management. To determine the scope of application of Basel II, the supervisor should adopt a strategy that responds to the specific

circumstances and align with the goals presented. Accordingly, the supervisor must consider aspects of the banking system, the sophistication of the banking industry, the main supervisory objectives and strategies in relation to capital adequacy, the impact of the proposed scheme on capital adequacy and developing new banking products and services and make an assessment of relationships with local institutions and institutions that originate from other countries. After an evaluation of these aspects, supervisors may allow use of only Basel I, or a simpler approach to Basel II, while the supervisor expect that some of the banks in their jurisdiction transfer to more advanced approach in the implementation of Basel II.

State of readiness of the banking system and the willingness of supervisors is a key factor in determining the terms and implementation of Basel II.

During the implementation of Basel II, each bank must implement five basic steps, which are:

- Preservation of historical customer data (could be allowed to be only two years if it introduces a new approach);
- Deciding on the best approach (depending on the cost of implementation, the scope of the planned work, the savings in the implementation of the chosen approach, the market effects of the approach used, etc.);
- Understanding of the need for data (historical data, current data and information needed for publication);
- Development model (should be repeatable, independent of individuals and impossible to manipulate);
- Reporting (includes all the above elements).

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## **GLOBAL IMPORTANCE AND THE ROLE OF OPERATIONS MANAGEMENT IN THE SERVICES AND MANUFACTURING**

### **ABSTRACT**

*One of the most important human activities is operations management. Operations management is about manufacturing goods and providing services. First crucial knowledge on operations management was published by Frederick W. Taylor (1865-1912). His basic work and interests during his life were to improve efficiency in production, not only to cut costs and increase profits, but to provide the employees higher salary by making them more productive. In addition, from the scientific perspective Taylor was the first to investigate **job operations, working stations and processes**. He believed that by scientific methods implementation, instead of approximate experimentation, it is possible to maximize productivity without greater use of human energy and effort. By setting the logical sequence of job operations and working stations, Taylor established job processes.*

**By defining job operations and job processes Taylor was able to set foundations for new scientific discipline – operations management.** Operations management was from 1900. to 1965. concerned with studying the conversion of inputs into outputs in exclusively industrial companies. In the 1970s the benefits of job classification, working hours and studying job operations and processes reflected in the other areas of human activities, i.e. **services**. With the input-process-output method, operations management has the key position in current business environment. Today operations function has the significant role as vital strategic element. Finally, organizations goals are better focused at satisfying customers needs for goods and services worldwide.

Thus, operations management is *important scientific discipline*. Operations management is concerned with creating goods and services we all depend upon. Creating goods and services is the

very reason for any organization's existence, regardless of how small or large it is, whether it is manufacturing or service organization, for profit or not for profit, etc. Most companies have understood the importance of operations, because they know that effective operations management creates the potential for increasing revenues, and at the same time, enables goods and services to be produced more efficiently. It is understandable why this combination of higher incomes and lower costs is important for any organization.

Operations management is also *exciting*. It is at the centre of numerous changes that affect the business world – changes in the customer needs, changes in the supply network brought about by the internet, changes in what we want to do at work, how we want to work, where we want to work, etc. Operations management was never as crucial and at the heart of any business and cultural changes as it is today.

Operations management is also *challenging*. Promotion of creativity that will allow organizations to respond to numerous changes, is increasingly becoming the main task for operations managers. They have to find solutions to technological and ecological challenges, social responsibility pressures, increasing market globalization and areas in scientific management which are hard to define.

### **WHAT IS OPERATIONS MANAGEMENT?**

Operations management is concerned with conversion of inputs into outputs of goods/services. Everything you wear, eat, sit on, read or use at sports grounds or in other activities, you owe to operations managers who organize production of these items. Every book that you take from library, any sort of medical treatment, service that you expect to receive in a store or lecture that you attend at university, have been produced. Although people who monitor the production of these products and services are not always referred to as operations managers, that is what they actually are. This is the main concern of this paper – tasks, questions and decisions of those operations managers who have created services and products we all depend on. At the very beginning we will investigate what „operations management“ implies, how operations processes are found everywhere, how they are all similar, yet different, and what it is that operation managers do.

**Operations management** is the activity of managing resources which are devoted to production process and developing goods and services. Therefore, operations management is about the process of transformation. The processes of transforming inputs into outputs and adding value to a product/service are performed through operations. **Operations function is the part of the organization** that is responsible for this activity. Any organization has specific operations functions because every organization produces a specific type of product and/or service. However, not all types of organizations refer to operations function by the same name (we also use alternatively short terms „operation“ and „operations“, or „operaton function“). Operations managers are skilled professionals who are responsible for managing certain or all organizational resources that constitute operation function. In some organizations operations manager can be called differently. For example, he/she could be referred to as „Fleet Manager“ in a distribution company, or „Administrative Manager“ in a bank or „Sales Manager“ in a supermarket, „Purchasing Manager“, etc.

Let's see what type of customers participate in a transformation process. In service operations, managers sometimes think that it is useful to differentiate **output** from **throughput** types of customer participation.

Output is „produced“ service, throughput is something that goes through the process. In pediatric clinic output is a medical service given to a child, which passing through the transformation process represents throughput. In a fast food restaurant, unlike the previous example, a customer does not pass through the process of transformation. Outputs, for example, are hamburgers, quickly served (both goods and services), while meals in a process of preparation represent throughputs. Customer represents neither output nor throughput.

Both clinic and restaurant provide services, but their outputs and throughputs have major differences.

Throughputs are things which are in the process of transformation, while outputs are products/services which come out of this process.

The system of providing services includes physical elements and labour, which is used to produce services. Usually, the following five elements are considered to be parts of the service system:

1. **Technology.** The level of automatization, equipment, vertical integration.
2. **Process flow.** The sequence of events used in a service production.
3. **Process types.** The quantity of process contacts, the degree of adaptability to customer requirements and integration.
4. **Location base and size.** Place where the service process is located, the size of any service place.
5. **Work force.** Skills, type of organization, rewarding systems, degree of participation.

### **Operations in organizations**

Operation function is the central function to the organization because it produces the goods and services, which are its reason for existing. However, it is not the only, and necessarily the most important function. It is, nevertheless, one of the three core, essential functions of any organization. These functions include:

- **Marketing function** (including sales), which is responsible for communicating the organization's products and services to its markets, in order to create future customer requests for its services;
- **Product/service development function**, set for creating new and modified products and services, in order to create future customer requests for its services.
- **Operations function**, responsible for *fulfilling* customer requests for service throughout the production and delivery of products and services.

In addition, there are also *support functions*, which allow central functions to operate efficiently. We may, for example, amongst many functions distinguish two important ones:

- **Accounting and finance function**, which provides information to help economic decision making and manages financial resources of the organization.
- **Human resources function**, which recruits and develops the organizations employees and takes care of their welfare.

Remember that different organizations will their various functions call different names, and that that they will have different set

of support functions. However, almost all organizations will have the three central functions, because all organizations have the fundamental need to sell their services, satisfy their customers and create the means to satisfy customers in the future. Table 1 shows the activity of the three core functions for a sample of operations.

In practice, there is not always clear division between the three core functions or between core functions and support functions. In fact, many of the interesting problems in management (as well as the opportunities for improvement), lie at the overlapping boundaries of these functions. This will create some confusion over where the boundaries of these functions should be set. We use here relatively *broad definition of operations*. We include the product/service development activities, engineering/technical activities, information systems activities and some of the human resources, marketing and accounting activities in the sphere of operations management. Most importantly, we believe that core operations functions include all of the necessary activities in order to satisfy customer requests. This includes sourcing products and services from suppliers and delivering products and services to customers.

Working effectively with other parts of the organization is one of the most significant responsibilities of the operations managers. The most important thing in the modern management is that functional boundaries do not hinder efficient working of the internal processes. Figure 1 illustrates some of the relationships between operations and other functions regarding the flow of information between them. Mind you, however, that support functions have different relationships with operations than the other core functions. Responsibility that operations management has towards support functions is to primarily understand operations needs and to help them satisfy these needs. The relationship towards the other two core functions is more equal, it is less „this is what we want“, and more „this is what we can do currently – how do we reconcile this with broader business needs?“

**Figure 1 The relationship between operations function and other core functions and support functions in an organization <sup>(1)</sup>**

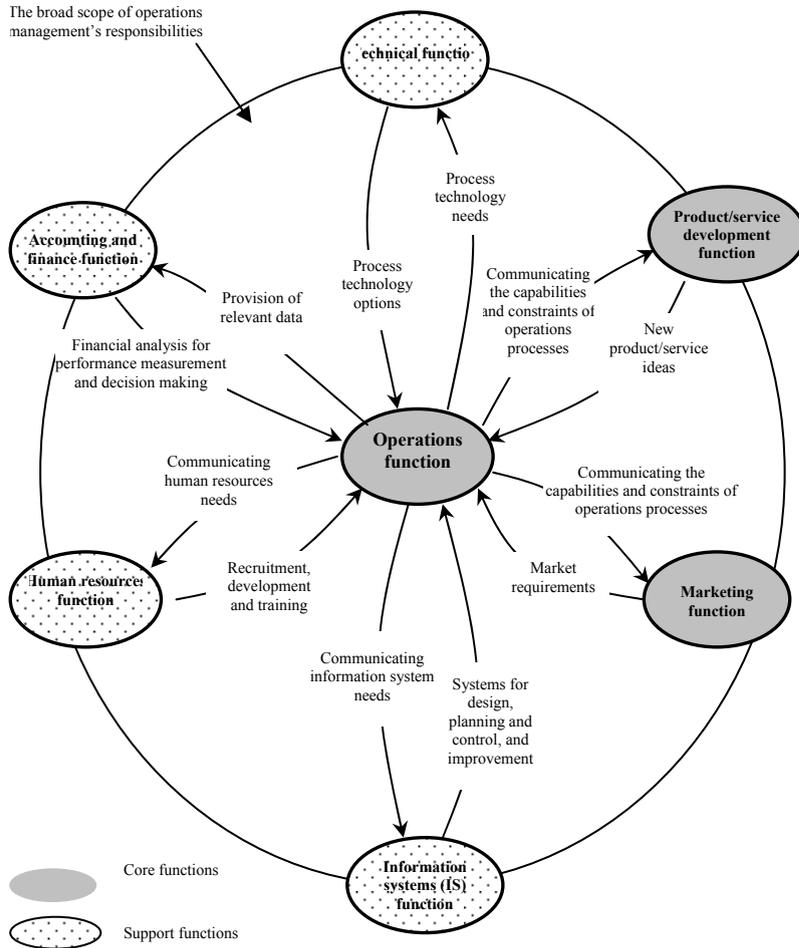


Table 1 The activities of core functions in some organizations

Core functional activities	Internet service provider (ISP)	Fast food chain	International aid charity	Furniture manufacturer
Marketing and sales	Promote services to users and get registrations; Sell advertising space	Advertize on TV Create promotional materials	Make funding contracts Mail out appeals for donation	Advertize in magazines; Determine pricing policy; Sell to stores
Product/service development	Create new services and comission new information pack	Design hamburgers, pizzas, etc. Design decor for restaurants	Develop new appeals campaigns Design new assistance programmes	Design new furniture; Arranging fashionable colours
Operations	Maintain hardware, software and content; Implement new links and services	Make burgers, pizzas, etc. Cleaning Maintain equipment	Give service to beneficiaries of the charity	Make components Assemble furniture

### **Operations management in the smaller organizations**

In the theory of management, operations management is equally important for any organization. In practice, however, managing operations in small and medium-size organizations is different, depending on the problem. Large companies have enough resources to delegate individual workers specialized and complex tasks, but smaller organizations often do not have such ability. Therefore, managers will often have to perform different jobs as the need arises. Such informal structure may allow company to respond quickly when opportunities or problems arise. But, making decisions may also become confusing, since the roles of the individuals overlap. Small companies may have exactly the same problems as large companies, which operations managers should solve, but they can be more difficult to separate from other problems in the organization. However, small organizations may also have significant advantages in addressing some of the issues.

### **Operations management in not-for-profit organizations**

Terms like *competitive advantage*, *markets* and *business*, are usually associated with companies which operate in not-for-profit sector. Operations management, however, is also relevant to organizations whose purpose of existing is not primarily to earn profits. Managing the operations in an animal welfare charity, hospitals, research organizations or government departments is essentially the same as in the commercial organizations. Operations should have the same stages in decision making – how to produce goods and services, invest in technology, eliminate unnecessary activities, determine the measures for successful job performance, improve operations performances, etc. However, strategic objectives of not-for profit organizations may be more complex and include the mix of political, economic, social and environmental objectives. Because of this, in some situations there is a greater chance to make operations decisions regardless of conflicting objectives. So, for example, the operations staff in the Children's Welfare Department need to face the conflicts between the increased costs of extra social workers and risks of a child not receiving appropriate protection. Nevertheless, numerous topics covered in this paper are relevant for all types of organizations, even when the context is different, and some terms may have to be adapted.

#### **Inputs and outputs**

Operations represent the complete part of the work process, which is performed at one work station, using equipment, tools and devices. In the process of conversion inputs into outputs, operations are set in a logical sequence. This is how the production or service process is formed. In production processes operations are functionally interdependent, in order to form final product at the last work station.<sup>(2)</sup>

So, operations create products and services by converting inputs into outputs. This is achieved through the „input-transformation-output“ process. Figure 2 illustrates the general model of transformation process, which is used to describe the nature of

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<sup>(2)</sup> Prof. dr Milorad Popara; Prof. dr Bogdan Popara: Operativni menadžment, Evropski univerzitet, 2004 (str. 90 i 87)

operations. Put simply, operations in the network are processes that take in a set of input resources, used to transform something or they are transformed themselves, into outputs of products or services. Although all the organizations adapt to this model (input-transformation-output), the nature of their specific inputs and outputs is different. For example, if you are far away enough from the hospital or car plant, at first they are very similar, but if you move closer and study their structure, clear differences start to emerge. First, car plant has production operations which create „products“, and hospital has service operations which create „services“ that change the psychological condition, feelings and patient’s behaviour. What makes the essence of any organization may also be different. The motor vehicle plant includes the production of metal parts and processes for their assembling, while hospital includes processes for diagnosing, care and therapeutic processes. However, the most important difference between these operations may be the nature of their inputs. Car plant transforms steel, plastic, rubber and other materials into a vehicle. Hospital transforms patients from the state of illness into the state of health. Patients are the part of inputs that come into the operation and outputs that come out from the operation. It significantly influences the way of how to manage operation.

### **Inputs to the process**

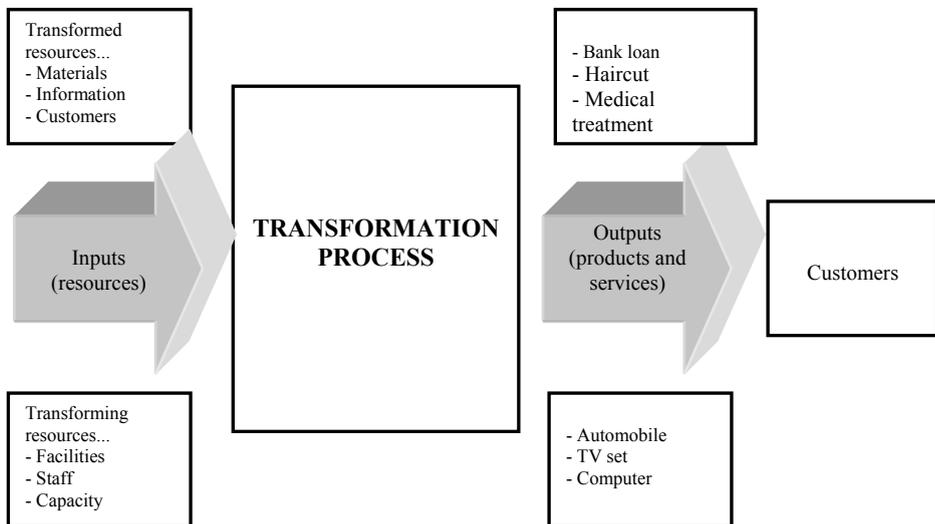
One set of inputs that come into any operations processes are called **transformed resources**. These are the resources that are processed, transformed and reshaped in a process. They usually represent the combination of the following:

- **Materials** – operations that process materials do this by transforming their *physical characteristics* (shape or content, for example). Most of these operations belong to this type. Other operations transport materials in order to change their *location* ( the companies which deliver parcels, food products, furniture, technical goods, etc). Some operations, such as retail operations, change the *ownership* of materials. Finally, some operations, in business environment, *store* materials, such as warehouses.
- **Information** – operations that process information do this by transforming the information characteristics (i.e. the purpose or form of the information). This is done by accountants. Some operations

change the *owner* of the information, for example market research companies sell information. Some operations store information, for example archives and libraries. Some operations, like those that telecommunications companies perform, change the *location* of the information.

- **Customers** – operations that process customers can change their physical characteristics in the similar way to materials processing (for example, operations which perform a hairdresser or a dentist). Some operations *accomodate* customers (hotels for example). Airlines, mass rapid transport systems and bus companies transform the *location* of their customers, while hospitals transform the *psychological* state of their customers, as, for example, the most of the entertainment services do (music, theatre, television, radio and theme parks).

*Figure 2* **Input – process – output**



One of the above mentioned operations is often dominant, i.e. **fundamental** in the process. For example, bank devotes part of its energies to producing printed statements of accounts for its customers. In doing so, it is processing **inputs of material**, but no one would claim that a bank is a printer, because it does not include its basic

activity. A bank is also concerned with processing **inputs of customers**. It advises them on their finances, cashes their cheques, deposits their cash and has direct contact with the clients. Most of the bank activities, however, relates to the processing of **inputs of information** about financial affairs of their clients. As clients, we may be dissatisfied with badly printed financial statement, or with not being treated appropriately in the bank. But, if bank makes errors in our financial transactions, we suffer in a most fundamental level. Tabel 2 illustrates operations with their dominant transformed resources.

*Table 2* **Dominant transformed resources of various operations**

<b>Predominantly transforming materials as inputs</b>	<b>Predominantly transforming information as inputs</b>	<b>Predominantly transforming customers as inputs</b>
All manufacturing operations	Accountants	Heardressers
Mining companies	Bank headquarters	Hotels
Retail operations	Market research company	Hospitals
Warehouses	Financial analysts	Mass rapid transports
Postal services	News service	Theatres
Container shipping	University research unit	Theme parks
Trucking companies	Telecommunications company	Dentists

The other set of inputs of any operations process are **transforming resources**. They have influence on transformed resources. These resources include two important types of resources which act as „building blocks“ in all operations, and these are:

- **Facilities** – the buildings, equipment, plants i process technology of the operation;
- **Staff** – the people who operate, maintain, plan an manage operations (we use term „staff“ to describe all the people who perform operation, at any level).

The nature of both facilities and staff competence will differ between operations. Facilities of a five-star hotel consist mainly of „low-tech“ buildings, furniture and equipment. To a nuclear-powered aircraft carrier, its facilities are „hightech“ nuclear generators and sophisticated electronic equipment. Staff will also differ between operations. Most staff, employed in a domestic refrigerator assembling plant, may not need high level of technical skill. In contrast, most staff, employed by an accounting company, are probably highly skilled in their particular technical skill, i.e. accounting. Although skills vary, all employees may contribute to performing operations. If an employee working on assembling refrigerator parts always misassembles them, it will dissatisfy customers and increase costs, just as an accountant who cannot add up. The balance between the facilities and staff also varies. Computer chip manufacturing companies, like Intel, will invest considerably in physical facilities. A single chip fabrication plant may have costs which are over three billion dollars, so operations managers will spend a lot of their time managing their facilities. In contrast, a management consulting company largely depends on the quality of its staff. Here operations managers greatly deal with the development and deployment of consultant skills and knowledge.

### **Outputs from the process**

All processes exist to create products and services, and although products and services are different, the distinction can be subtle. Maybe the most obvious difference is in their **tangibility**. Products are usually tangible. You can physically touch a television set, a newspaper, a table, a chair etc. Services are usually intangible. You cannot touch consultancy advice or a haircut. When you are having your hair cut, the service is simultaneously spending and producing, but its effects will last for a period of time. Services may also have shorter stored life. Products can be stored for a time, some food products for only a few days, while some buildings last for thousands of years. The life of a service is usually shorter. For example, the service of „accommodation in a hotel room for tonight“ will perish if it is not sold before tonight – accommodation in the same room tomorrow is different service.

Service is something which is produced and spent at the same time. For this reason, service is never material. Only its result can be

noticed after the operation (or process) is over. Service cannot be produced at one place and transported to other one, as goods can, nor it can be stored. In order for service to be produced the direct contact between a service provider and a service receiver is needed. Service reflects in the degree of satisfaction or dissatisfaction of service provider or receiver.

Examples of inputs and outputs, depending on the processes that are performed in different systems, are shown in Table 3.

**Table 3 Inputs and outputs, depending on the processes performed in various systems**

<b>Production</b>	<b>Inputs</b>	<b>Outputs</b>
Bank	Tellers, staff, computer equipment, assets and energy	Financial services (loans, deposits, keeping things, etc)
Restaurant	Cooks, waitors/waitresses, food, equipment, assets and energy	Meals, parties and satisfied guests
Hospital	Doctors, nurses, staff, equipment, assets and energy	Health care services and healthy patients
Faculty	Faculty, staff, equipment, assets, energy and knowledge	Educated students, research and public services
Plant	Equipment, facilities, work, energy and raw materials	Final products (goods)
Airlines	Aircrafts, equipment, pilots, flight attendants, maintenance staff, work and energy	Flight from one location to another
Hotel	Building, restaurant, rooms, swimming pool, sports grounds, human resources	Pansions, accomodation, restaurant services, (dis)satisfied guests

### **SERVICE FRAMEWORK**

In the process of service designing it is important to bear in mind the basic framework, illustrated in Figure 3, which was proposed by Albrecht and Zemke (1985) in *Service Amerika*. This framework,

or service triangle, suggests that there are four elements that should be considered in service production. These elements are: buyer (user, customer, client), people, strategy and system.

Buyer (user, customer, client) is, of course, at the centre of the triangle, because the service always has to be focused on the buyer. People are employed in a service company. Strategy is a vision or philosophy, which is used for managing all the aspects of service delivery, and the system includes: physical content of the process and the operations in the process.

Lines that connect elements in the Figure 3 have several interesting interpretations. Line that goes from the buyer to the strategy shows that the buyer should be in the first place, so that his/her actual needs are fulfilled. Management should raise a question of what the buyer is thinking of. How he/she is thinking? What he/she really wants? A company also really has to connect service strategy with the buyer through communication. What the company produces that is also unique? What is the thing the buyer would buy from that company?

Line that goes from the buyer to the system shows that the system, which consists of the actions and the equipment, should be designed so that the buyer is always considered. Crowded airplanes, formalities, procedures difficult to understand and uncomfortable restaurants, all of these does not lead to a good service for the customers. Customer service is not to be considered additionally, but it has to be designed as the part of the system which delivers it. The line that goes from the buyers to the the people shows that each individual should follow the idea of customers. This relates not only to the people who provide services, but to all the people in the organization. If the people do not serve the customers directly and properly, they should serve someone who does so: even accountants, people who work using computers and engineers have „internal“ buyers (users) inside their organization. People are the most important element for providing superior services.

Outer lines in the triangle also have the straightforward meaning. The people-system line shows that people depend on the system in order to provide good service. Most of the problems in the system has been assigned to the malfunctioning systems rather than to the people. Is it too much to ask that computer system operates at the desk where the rent-a-car operations are performed, and that the flight

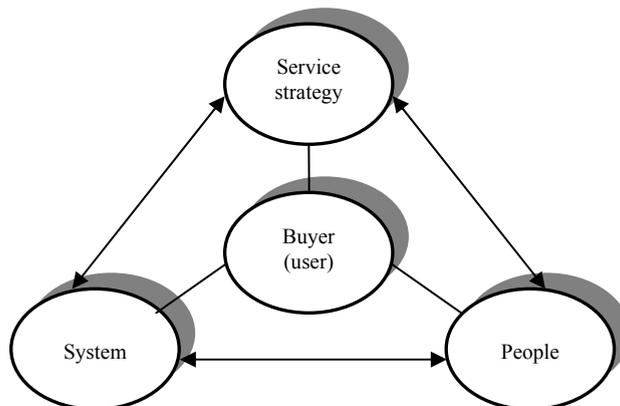
reservations procedure in an airline company is organized without any obstacles? Service systems should be designed in such a manner that they are simple, rapid and completely safe.

The strategy-system line shows that the system should be the logical consequence of the strategy, and it is rarely so. The systems often accrued over time in such a way that they were designed to increase constantly. The result of this is that systems actually do not support the supposed strategy, and besides this, they are not well organized to make up the whole.

Finally, the strategy-people line shows that everyone in the organization should be aware of the strategy. People at the front line, who provide the service, are often separated from the strategy. The management refers to them as „a cog in a cogwheel“, which does not have to know about the service strategy. The result of this is delivery of poor service.

The concepts that are connected in the service triangle ensure an interesting way of thinking about service production. These concepts are useful for shaping service systems and for solving the problems in the services. The service triangle can be used for diagnosing the service problems and determining the possible causes for their poor quality.

*Figure 3* **The Service triangle**



### **Shaping the service production**

Every service extends in its cycle (service cycle). The cycle begins from the point where the buyer has the first contact with the system of service delivery. This continues with each next contact between the customer and anyone else from the company. For example, if you contact JAT airline company, the first point of contact may be the telephone call regarding the time of departure or arrival of your plane. After that, you actually book the flight. Then you get your ticket and pay the airfare. When you arrive at the airport you will be received by the customer service staff, your ticket is taken, it goes through a procedure and your baggage is checked in. Then you board the plane, you get service during your flight, you leave the plane and take your baggage. In each of these events you as a buyer (user) create your own understanding/perspective, consciously or unconsciously, about whether the airline company satisfies your needs or not.

Albrecht and Zemke emphasise the idea of „the moment of truth“. The moment of truth is every point in time when the buyer (user) gets in the contact with the service systems, during the cycle of the service delivery. At this time, the customer can receive good or poor service, and create his/her own perspective on the service that he/she received. The sum of these moments of truth is the thing that finally determines whether the buyer will continue to buy from a certain company. The bad moment of truth can erase many favourable moments, so it is important that every contact in the service cycle is favourable, while others should be extraordinary. It is necessary that one should be successful in all moments of truth in the service cycle. American airline company SAS has announced that they have 50,000 moments of truth every day. It is estimated that employees in Meriot Corporation, 140,000 of them, have up to 6 million moments of truth every day.

Buyer (user) perception of the service is the function of all the previous moments of truth that the buyer has experienced. It means the following:

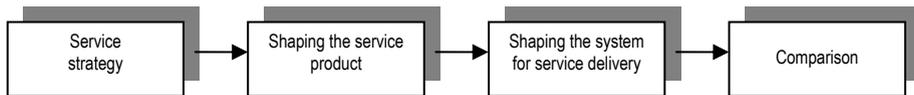
Service =  $f$ (moments of truth)

Managing the moments of truth, with the aim to create the positive experience with the services, represents the essence of managing them.

Using the above mentioned concepts we can define the service model, shown in the Figure 4. Thus, the service strategy is discussed

first, this is followed by defining the service product, then the system of service delivery is defined and finally the service criteria are established.

*Figure 4 Service model*



### **Most operations produce both products and services**

Some operations create only products, while others only services, but most operations produce a mixture of both. There are numerous operations ranging from „pure“ products producers to „pure“ service producers. Crude oil producers are exclusively interested in the product which comes from their oil wells. The same is with the aluminium smelters, but they might also produce some services, as giving technical advice. Services produced in these circumstances are also called **facilitating services**. To an even greater extent, machine tool manufacturers produce facilitating services such as technical advice, engineering services application and training. The services produced by the restaurants are the essential part of what the customer is paying for. Restaurants also perform manufacturing operations which produce food, and service operations in the form of advice, ambience and food serving. Information systems provider can produce software, but it primarily provides services for its customers through **facilitating products**. Naturally, although management consultancy produces reports and documents, it would see itself as a service provider which is using facilitating products. Finally, some pure services do not produce products at all. A psychotherapy clinic, for example, provides therapeutic treatment for its patients, without any facilitating products.

### **Merging services and products**

Increasing distinctions between products and services is more difficult to define and not particularly useful. Information and communication technologies even overcome some of the consequences of the intangible services. For example, internet retailers

„deliver“ most of its services to their customers' homes. It is even difficult to make distinctions between the products and the services in the official statistics, compiled by the government. Software sold on a disc is regarded as a product. The same software sold over the Internet is regarded as a service. The basic purpose of all companies, and therefore operations processes, is considered to be „to service customers“. Thus, it is stressed that **all operations are service providers**, who can produce products as a means of serving customers. Our approach in this paper is similar to this. We treat operations management as extremely important for all organizations. Whether they see themselves as the producers of goods or providers of some services, is of secondary importance.

### CONCLUSION

The aim of this paper is to provide a clear, well structured and interesting treatment of operations management the way it is applied in a variety of companies and organizations in developed countries of the world. Here we describe the logical path through the activities of operations management, as well as an understanding of their strategic context which provides undisturbed growth and development of a company.

More specifically, the essence of this paper is to emphasise the importance of operations management since it is:

- ***Strategic in its perspective***, because it unambiguously treats the operations function as the function of extreme importance for the competitiveness.
- ***Conceptual*** in the way it explains the reasons why operations managers should make timely decisions and how this activity has such a big influence on the quality of our lives.
- ***Comprehensive*** in encompassing important ideas and issues relevant to most of the companies and to present the broader insight into the field of operations, realistically and practically.
- ***Practical*** in the way it discusses the problems and difficulties in making valid decisions in practice.
- ***Balanced in its treatment***, which means that in this paper we have presented the balance of economic activity between service and manufacturing operations. Most of the examples treat the problem of service organizations, and smaller number of them treat business

practice of manufacturing organizations. Today service operations take the lead over manufacturing operations.

Global focus of the operations management stresses the importance of the new technologies, transportation and communications. These elements enabled the growth of the global market for products and services. This global market should be observed as a whole, where national operations lose their importance. The resources, workforce, skills and products are becoming global. Operations managers respond to all challenges of the global market through innovations, which develop and move ideas rapidly, and new products and services, whenever needed.

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**DR. JELENA POPARA**

**EFFECTIVE MANAGER AND MANAGEMENT  
PROCESS IN THE COMMERCIAL BANK**

- modern approach -

**INTRODUCTION**

*The job of a manager is to make decisions. Uncertainty is his/her opponent. Overcoming is his/her mission* (John McDonald). Educated, competent and communicative executive manager is a competitive advantage in human resources department of every commercial bank. Commercial bank is a business system that functions continually, and this permanence of doing business requires constant business decisions making. Decisions are the essence of the commercial bank *management*. They meet the challenges, but it is not always clear whether these challenges exist or not, or whether it is necessary to make a decision. Decisions should be made appropriately; passivity may lead to making wrong decisions, *proactive* direction should always be chosen, and control mechanisms of monitoring decision application has to be conducted all the time.

**1. Defining and the basic specifications of managers' work in the commercial bank**

**Effective managers** of the commercial bank *produce* decisions and know *how* to *produce* them; in other words, he/she has the ability to make the difference between business situations and to apply the ways suitable for the dominant factors of a certain business situation. As in other business systems, there are many situations which represent business challenges, emerging every day in the commercial bank. They are often highly prominent, and also hidden. Sometimes the pressures to meet them result in not taking any action. There are a few reasons for this. *First*, the business units managers of the commercial bank (business bank) cannot be sure how much time and energy it will take them to meet the business challenge, and on how many deviations will they come across during this process. *Second*, dealing with the challenge in the business environment is always some sort of a *risk*, because if the challenge is not *met*, this will not benefit neither the work process nor the manager's career.

*Third*, business challenge may cause some uncertain contents, so it is easier to postpone meeting it, and focus on less prominent business challenges.

The term *manager*, in banking business, usually refers to an individual who performs the technology of *material, energetic* and *information resources* management, using people and communication as his/her tools. Managers' behaviour includes *responsibility* and *authority*. The manager of domestic payment operations is *responsible* for the operations of this sector and *authorised* to take actions regarding business assets and staff. The manager of the cross-border payment operations has the same responsibilities and authority, but in his work sector.

Managers in the commercial bank face not only decision making requirements in their *business units*, but also the requirements set by the bank's *top* management, legal and physical entities participating in payment operations, staff from other business units etc. Word „*demanding*“ can surely describe additionally the managers' work place in the commercial bank. The manager in the commercial bank has to know and understand the basic principles of *banking management* and to apply them to banking operations management. The basis of the *management process* is the same in all types of banking business and on all *levels of management*, even if the organizational objectives and work environment are different.

You are not born as a manager, you become one. He/she has to master modern methods of managing banking business, primarily their technological basis (which is in recent years particularly prominent in electronics), he/she has to manage both his/her and other people's time, to contribute to *effective* work realization with *senior managers*, both professionally and personally, and to make decisions. To summarise, the *basic task* of the manager in the commercial bank is to *provide and use bank resources, transforming* them through the management function. Realization of the business requirements, in relation to the already mentioned levels of demand and biological (human) resources maintenance, represent the *basic results* that the managers are expected to give.

## **2. Defining and the basic specifications of the management function in the commercial bank**

*Effective management* is the process of using disposable resources of the commercial bank by the top management. It is business resources of the commercial bank that top management dispose of, and *organizations objectives* that it wants to accomplish for the commercial bank as a whole (i.e. for the appropriate *department or work sector*).

Business resources of the commercial bank are critical factors of banking operations. There are *eight* resource categories: the people, money, work procedures and methods, energy, materials, equipment and work space. Business resources are limited. As a rule, the business unit manager of the commercial bank does not have all the resources he/she needs, or does not have enough resources. Thus, he/she has to optimize his/her *business decisions*, and therefore *business actions*, according to the quantity and quality of the existing resources, in order to reach organizations objectives. The main tools that the manager uses, regarding the previously mentioned constellation, are his/her skills: *conceptual, human* and *technical*. *Conceptual (intellectual)* skills are based on the manager's abilities to possess and adopt new information, to identify business challenges, to be able to meet them and to learn from both their experience and the other people's experience. Finally, he/she has to be able to make decisions. *Human skills* are based on the psycho-categorical set of manager's characteristics (authority, enthusiasm, communication skills, understanding of the group work) through which is possible to establish appropriate, desirable interrelationships. *Technical skills* are based on the use of different abilities to apply certain work procedures, primarily through technical and technological logistics (computers in the first place).

Organizations objectives (what the commercial bank, or the top management of the commercial bank want to do) show the purpose of the bank products flow and its existence. We may distinguish such organizations objectives as: *main business objective* – satisfying the needs of the existing and potential customers for bank products with increasing revenues (for business operations) or decreasing costs (for institutional operations), and *sub business*

*objectives* – (1) focus on target market segments, (2) defining and keeping quality standards for the bank products, (3) bank products positioning, (4) keeping or creating *image* on the banking market (interaction between what the commercial bank provides and the degree of the customers' satisfaction) and (5) developing strategic effectiveness.

General organizational objectives are different between the commercial banks. It is, however, relevant for the managers at every level of hierarchy (the office managers, managers of a department or sector, top managers) to know what results should be accomplished in the process of creating bank products, in order to attain the business objectives. Once the idea regarding the range of business objectives of each organizational part of the commercial bank is projected (adopted), it creates room for formulating and implementing appropriate *business strategy*. Management, as the business activity *par excellence*, emphasises doing business marked by *creativity* and *originality*, rather than by *experience* and *maturity*.

### **3. Management levels in the commercial bank**

A general approach to the commercial bank management, as the process of creating and maintaining the conditions under which the bank staff, working in the programmed (structured) departments, or services and sectors, attains efficiently organizations objectives according to the plan, can be functionally observed as the composite whole (ideas, assets and people). It provides the base for the following three management levels: strategic management, organizations support management and operations management.

*Strategic management* is the level of the management which starting point is an idea, followed by its elaboration and analysis, planning - which anticipates further flow of the activities and establishes the business policy of the commercial bank, then there is the business process realization programme, setting objectives and finally the business strategy development.

Organizations support management is the level that starts from the planned assets dedicated to the turnover process, by creating organizations structures, work forms and relationships.

Operations management is the level realized in the three activity directions: the first direction means choosing the competent and reliable associates and their deployment and training; the second

direction means taking actions in the sphere of the established tasks, or implementing devised planned and organized activities (decision making, task delegation, coordination); the third direction refers to the control, work assessment and reward system of the bank staff.

The managers position in the each department, service or sector depends on the material and financial power of the bank. The commercial bank with its numerous affiliations (of different types) can potentially have: *higher level* of the management structure - top management team, Chief Executive, Senior Executive; *middle level* of the management structure – Middle Managers, or managers of a certain sector; and *operational level* (Supervisors) – the rest of the commercial bank employees dealing with certain managerial activities.

### **CONCLUSION**

Effective manager is a support individual in the work process of the commercial bank; he/she is an individual who projects the results necessary to achieve business objectives. The change is the only constant, and the business life is not something that can terminate, but something that the bank staff feels all the time, accompanied by overwhelming proactivity. Here success is created by the manager using his/her own experience and knowledge. The manager is the partner with his/her employees, whose *work memory* (everything that is simultaneously activated in their mind ) can potentially serve as a tool for successful work process development and realization of the positive work effects. Successful people create returns, and returns lead to creating confidence (J. O'Connor & J. Saymoore in *Introduction to NLP*). The manager gives life to something that is new (*creation*), connects two (or more) previously unconnected things (*synthesis*), improves the bank products (*modification*) etc. The manager, with his broad vision has to pay respect to his/her employees, he/she cannot punish their unsuccessful creativity and has to eliminate putting pressure on the short-term results. Also, the manager has to stimulate and encourage intellectual staff of his work segment, to give them freedom to act, time to explore different ideas, and to apply them. He/she cannot immediately demand seeing the tangible results, he/she has to understand the importance of creative contribution, and cannot get all the credits for the work done. The most important thing is to be good at communication. It cannot be anywhere near enough to stress the importance of speaking, listening

to and writing. The manager has to accept the duties and responsibilities, and to put interests of the commercial bank in the first place. Established image and positive personality help manager to shape work environment, to retain high morale and motivation of the employees and to transform a group of individuals into teams. The manager also has to find ways for self-improvement, setting career plans and holding onto them.

Management needs to continuously harmonize opportunities and threats, activating the potentials of the staff as the source of acquiring knowledge. This way, management creates the invisible property of the commercial bank that will protect him/her from the competition and survive in time. Management has to encourage its staff to realize their potentials and to engage them in useful activities. The more employees are observed as successful task executors, the more effort will they put in keeping their position. A man never loses if he tries. He loses if he limits himself. The commercial bank management is a complex activity. It refers to people and they are all different. Sincere behaviour is the only true policy of the manager. Two lies are only permitted: *I was wrong* and *You are right*. The manager has often to make one step forward in order to understand the others, and also to make deeper insight into him/herself. He/she primarily has to love banking business, and therefore the commercial bank where he/she works (which means no more making comparisons), and also bank partners (physical and legal entities), which are always sensitive audience. For the sake and satisfaction of his/her employees and business partners, the manager has to step forward, to throw off the mask and to breathe life into the job he/she performs. It is said that „kind words create confidence; kind thinking creates depth and kind giving creates love.“ Management of the bank always has to remember that „a man is the sum of his choices“, and that „the essence of doing business is beyond the business itself“. We could say that this is so in the mind set of the employees on the one hand, and the business partners on the other hand.

**DR. JELENA POPARA**

**MANAGEMENT COMPONENTS AND THE APPLICATION OF THE SPECIFIC MANAGEMENT PRINCIPLES IN THE COMMERCIAL BANK**

**INTRODUCTION**

Management in the commercial bank has the simple objective: creating the clear vision of the actual direction of the bank products (characterized by the integrity and with the focus on quality), keeping the professional interaction with the employees and the banks' customers, as well as devising the solutions that will satisfy their needs more. Through the process of planning, organizing, managing, controlling and evaluating, the management team of the commercial bank has to create a special *business offer* of the bank products and to present it as *sui generis*. In order to do this, management team first has to collect all the valid information about the previous transactions of the physical and legal entities, but also to consider what may be new in their wishes, requests and needs. The commercial bank offer will be successful only if it provides *value* and *satisfaction* to the target physical and legal entities. For the customers of the bank the product value reflects the perceived material and non-material benefits, while the parallel assessment of the customers reflects their satisfaction, resulting from the perceived characteristics of certain bank products that the customers expect the products to have. The multiple connections with the payment transfer participants create the foundations for the mutually beneficial business arrangements, and this has already become the fact that needs no proof. Naturally, this type of relationship has to be supported by previously established internal management, which coordinates the business activities and the employees from all departments, services and sectors in the commercial bank, in accordance with the customers point of view.

**1. Management components in the commercial bank**

The basic management components (or functions, activities) of the commercial bank are: *planning, organizing, managing, controlling*

and *evaluation*. Each of these components define what the manager of the commercial (business) bank has to be capable of doing.

**Planning.** *Planning* is the process of making business decisions regarding the analysis of the environment, objectives and strategy of the commercial bank's operations. The *first* level of planning relates to the basic objectives of doing business which are shaped by the top management of the commercial bank. Strategic and middle level managers create the specified objectives which then become the responsibility of different work segments. For example, the cooperation between these managers and the department managers may be benefit budget increase, which needs a significant rise in bank products sales. Thus, the managers should focus at developing the sales increase strategy. The *second* level of planning emerges when routine operations are established. These repetitive situations, such as crediting, need standard planning that can be used often. Middle managers create these plans. The *third* level of planning relates to the *daily activities*. For example, scheduling, special events plans, new programme training and other activities need to be created. Operations managers are responsible for a great deal of this type of planning.

**Organizing.** *Organizing* is the process of making business decisions regarding the design of the commercial bank's organizational structure, which largely corresponds with the business resources and objectives we are trying to accomplish in the external environment. Organizing practically includes determining the *authority flow* (line structure organization where there is an downward flow of authority) and *communication* between the immediate task *executors* and a *manager* of the certain level (e.g. each employee should have only one direct manager to report to). Further, this component determines the relationship between the work positions in the commercial bank. It is also significant to emphasise that „line“ managers, such as general manager, sector manager, manager of a service or a department, form *the management chain*. They have the authority to delegate responsibilities, give orders and make decisions. In contrast, the managers of certain services, as, for example, Public Relations Services, cannot give orders. They can give advice to managers in the management chain. Organizational structure of the commercial bank is constantly changing. Thus, *organizational charts* and appropriate *business records* should also be subject to changes in order to respond to newly established organizational relations.

**Managing.** *Managing* is the process of making business decisions regarding coordination, motivation, and communication between the employees of the commercial bank. In our opinion, the commercial bank should promote the principle which suggests that no manager should manage the larger number of immediate task executors (the number that exceeds his/her intellectual or physical abilities). Managing includes staff motivation, and the attitude of the manager influences directly both the employees' attitudes and their work. The employees should know what they are expected to do. Discipline procedures for the employees should include both positive measures and different actions which can be used to help employees improve their behaviour. These actions range from informal counseling to employment termination. The manager should change his/her work style in accordance with the needs of the employees. It is important to establish the cooperation based on the equity and honesty. This management component refers to both accepting and applying the ideas of the employees that may act as the *inputs* of the better business results realization. When the manager disagrees with his/her employees, it usually results in low productivity, morale and big changes with the employees. In these circumstances the work is probably neither completed on time, nor corresponds with the quality standards. It affects the professional reputation of the manager.

**Decision making methods**

Managers can make decisions (and meet the business challenges) using two different methods:

**Programmed decision making** method includes using instructions for procedures, regulations and work place descriptions in order to manage routine operations and challenges (for example, what is the number of employers that should be engaged in retail banking, how to find the best ways to promote credit caerds?).

**Unprogrammed decision making** is used with non-routine operations and problems. This method requires using the power of thinking, judging, creativity, intuition and past experiences. New, difficult and unusual challenges need unprogrammed approach to decision making.

**Controlling.** *Controlling* is the process that starts with establishing job performance standards regarding the realization of the

bank products, followed by the actual efficiency assessment. Finally the performance standards and real efficiency are compared in order to see whether (and to what degree) the corrective action is necessary. Thus, it is of immeasurable importance that the manager knows the basic work components that his employees perform, to be familiar with work efficiency standards and to be capable of realizing the extent to which the employees reach these standards. Practice shows that the employees pay respect to their manager if he/she is good at doing *most* of their jobs, if not all of it, which can potentially enhance his/her personal authority.

**Evaluation.** *Evaluation* is the process of observing how good has the manager, together with his/her employees, contributed to accomplishing organizational objectives in his/her field of work. We will make a few suggestions in this context. Each manager has to respect the following saying: "If you are not part of the solution, you are part of the problem". If a solution, as a decision segment (the other two segments are authority and responsibility), is closer to its cause, the decision will have greater quality. /Solution is defined as determining the event which has to be activated in order to accomplish the objective with satisfying probability percentage. Solution is always carried out in the future as a decision. When the solution is found, manager can find him/herself in the predictable, risky or unpredictable situation/ Higher-level managers forward less number of decisions and lower-level managers forward more decisions. If the consequences of making decisions are more significant, then the manager should investigate the problematic situations thoroughly and from many sources. Decisions which are made in a hurry can trigger problematic situations. Thus, taking time to address the situation in a more complex way creates better alternatives. In a real business world, there are often only *satisfying* solutions to the business challenges, not the *perfect* ones. Sometimes managers spend a great deal of time searching for non-existent perfect solutions, though satisfying solutions can serve a purpose. As the manager's abilities grow, thus increases his/her belief that he/she is helping the department of the commercial bank, where he/she works, to reach the business objectives. In this sense, a significantly delicate activity that manager performs is related to the customers of the bank products. The manager is obliged to take the perspective on banking as the whole, as well as on his/her field of work and the work of the employees, from

the customers' point of view. The questions that the manager should ask him/herself could be as follows: "If I was a customer, what type of bank products would I like to get? And what quality?" The degree to which the manager is able to give answers to these questions and improve both his/her work and that of his/her employees, depends on the manager's meeting the obligations towards the customers of the bank products.

## **2. Specific management principles in the commercial bank**

Most of the scientific management principles, developed by the masters of the management theory and banking practices, is the same as today. The principles that in the meantime have singled out as specific and which have become the part of the modern banking conditions are: *authority*, *message communication* and *responsibility*.

**Authority.** *Authority* is the power which the business bank as the business system (including departments, services, work sectors) gives to the manager to do something or to order something to be done. The manager of the domestic payment operations, for example, is authorized to schedule and give tasks to his/her employees in order to provide their customers with: cash orders at any desk in the bank, order transactions in internal banking payment the moment the payment is completed, reporting about the changes on the account, etc. There are *two* types of authority: *formal* and *informal*. *Formal* authority is based on the manager's position in the organizational structure of the bank. *Informal* or *personal* authority is based on the managers position he/she has because of his/her abilities and personal characteristics (such as being communicative, having computer software knowledge, being charismatic and the like).

**Message communications.** Business message communication has two direction - providing information and feedback, which enables continuous functioning of the information flow and complete control over a business event. Every business message that the executive manager of the commercial bank communicates should mean moving forward. Next story supports this statement: *One morning a neighbour saw Nasradin Hodža kneeling in front of his house, searching for something. Wishing to help him, he asked him: "What are you looking for Hodža?" " I have lost my key!", Nasradin answered. They were looking for the key for some time, but could not find it. Then the neighbour asked: " Have you got any idea where have you lost it"*

*“Inside the house.”, Hodža answered. “Why, for Haven’s sake, we are looking for it outside the house“, the neighbour wondered. “Because there is more light outside“, answered Hodža.*

**Responsibility.** Managers in the commercial bank do not work in vain. They are responsible for different people inside and outside the bank. As individuals with formal authority, they are regarded as responsible for exercising this authority. Accepting the managerial functions means accepting responsibility that the function entails. The assessment of the managers is done according to how successfully they perform tasks. Some of the tasks they can do themselves, but for some tasks they need help from their employees. It is important to say that the responsibility is always individual. If the staff fail to do the task, it will be considered as the failure of the manager of a department. Being responsible for the results of the actions taken by the bank staff, is for the manager one of the difficult aspects of facing „the business reality“. *“Instead of trying to overcome the resistance toward things people are **not ready** to do, they have to find things people **are ready** to do..“* (Peters J.Thomas&Waterman H. Robert). Finally, the manager is responsible for him/herself. If the manager is the effective manager, not only does he help the business bank, but also him/herself. Many managers feel satisfied knowing that they did the job well. If they perform the tasks well, they will have more opportunities for promotion. They need to have a career plan, to set short term and long term objectives and develop the strategies in order to reach these objectives. This is the way to be fair to themselves.

**Specific characteristics of the managers in the commercial bank appearing in the process of message communication**

1. **Congruence.** Manager is spontaneous and is not on his/her guard, the interlocutor can stand on his/her ground.
2. **Empathy.** The manager’s ability to be aware of the interlocutor’s inner world as if it was his/her own world.
3. **Positive attitude.** Manager shows that he/she has accepted both the interlocutor and his/her problem, and wishes to help.
4. **Paying respect to the interlocutor.** The manager has to show his unconditional respect towards his/her interlocutor.

### **3. Emergency situation and crisis management**

Effective management in the business (commercial) bank is usually hindered by the emerging of crises and emergency situations. However, by developing the appropriate strategies in advance and keeping all security mechanisms alert, it can be possible to deal with such situations.

**Crisis management.** Crisis management and its budgeting should be incorporated in the planning component and the official top management policy. Top management should pay particular attention to the situation of crisis, and accordingly establish the system of monitoring the environment, with the aim to respond promptly to the first signals of crisis emerging. Employees at all levels should be prepared systematically and get appropriate training, so that they could react properly in such situations, being capable of communicating with the medias, local communities, police and government officials. Psychological logistics should spread from the top management to immediate task executors. If managed effectively, the crisis could be beneficial. Old and new challenges could be solved, new strategies and competitive advantages could emerge and some positive changes could appear. The manager who excels in the crisis management earns the bonus in his/her strategic behaviour since he/she was the one who has found the right solution, and have become the *hero* of the better system foresight. *“I know of no more encouraging fact than the unquestionable ability of man to elevate his life by conscious endeavor,* once Henry David Thoreau said .

**Emergency situation management.** Emergency situations are frequent in the turbulent environment of the commercial bank. Thus the top management should include them in their work content, or a wide range of possible strategies, as a potential business challenge. An emergency situation could emerge due to the *external factors* (environmental factors) or *internal factors* (factors inside the commercial bank). The possible scenario for the emergency situations could have the following stages: making choices (which could include establishing objectives, gathering possibilities, evaluating and estimating the appropriate and feasible option), taking activities (which would include: the implementation of the chosen possibilities, correcting errors in the plan), discovering (including systematic information gathering and fact analysis followed by the activitiy

results observation) /More in Bateman S. Thomas and Snell A. Scott, *Management*, McGraw/Hill Irvin, New York, 2002./

## **CONCLUSION**

Modern operations of the commercial bank mean understanding the events, changes of different states, the environment effects, conflicts emerging and management procedures. Business development and the effects of the environment press the top management of the bank to work constantly on the bank products design (including customers' wishes, requests and needs), aiming at the efficient and effective domestic and cross-border payment operations and other business activities. Bank products design strategy should be the key of the bank's successful mission and its development, defined as the process of discovering the unknown and creating the new value scale.

The purpose of the bank products management is to provide the right products for the right customers, to create customers' interests, to sell these products, to ensure new sale and, most importantly, to continuously improve these products. Success is the freedom for those who choose and think differently and long-sightedly.



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Prof. Dr. Miodrag V. Nikolic

Dr. Miodrag (Milos) Zecevic was born on August 18, 1959, in Pec (Kosovo). He is a citizen of the Republic of Serbia, and currently lives in Novi Sad. Mr. Zecevic is married and got three children. He graduated from Belgrade University School of Electrical Engineering (Department of Power Systems). Miodrag Zecevic completed his postgraduate studies at the European University Faculty of International Management with the highest grade and defended his master thesis titled *The International Management and Business of Multinational Companies – Crisis Management*, before the European University committee in 2009. Members of the master thesis defense committee were: *Academician* of European Academy of Science (Vienna) Prof. Dr. Milija Zecevic, *Professor Emeritus*; Prof. Dr. Miodrag V. Nikolic, *Full-time Professor*; and Prof. Dr. Boris Stanojevic, *Associate Professor*. After defending his master thesis, Mr. Zecevic acquired the academic title of *Master of International Management Science*. His doctoral thesis titled *Strategic Principles and Models of Logistics Management* he also defended before the European University Faculty of Engineering International Management committee in 2011. Members of the doctoral thesis defense committee were: *Academician* of European Academy of Science (Vienna) Prof. Dr. Milija Zecevic, *Professor emeritus*; Prof. Dr. Miodrag V. Nikolic, *Full-time Professor*; Dr. Veselin Dickov, *Assistant Professor*; and Dr. Tatjana Sibalija, *Assistant Professor*. After defending his doctoral thesis, Mr. Zecevic acquired the academic title of *Doctor of International Management Science*. Dr. Miodrag M. Zecevic is fluent in English and Russian languages, and possesses excellent IT skills in windows 7/XP/Vista; MS Office, Internet; System Administration Basics; Linux Basics (the level of *IT skills which is graded as Proficient*). Dr. Zecevic started his first job as trainee engineer with the Energoprojekt Construction Company's Equipment department, and got a permanent position in the same company department in 1987. He served as a head engineer in charge

of electrical and mechanical works in Sheraton Hotel in Kampala, Uganda (Africa), and as a chief supervisor of elevator maintenance and construction, and installing electrical network in the Hyatt Regency Hotel in Belgrade. Mr. Zecevic was also engaged in various other tasks as a chief of construction and as a head engineer in projects carried out by the Energoprojekt Equipment Company between 1991 and 1992 (e.g. for the Serbian Broadcasting Company in Kosutnjak). Between 1992 and 1995, Mr. Zecevic was in charge of several projects in Russia, as a head of the Energoprojekt Equipment foreign operations and chief engineer in charge of installing electrical systems in the Sokolniki Hotel in Moscow. Between 2000 and 2002, he served as a chief executive of Limes Company in charge of constructing and exploitation of the *Belgrade Arena*. Serving as assistant director with the Energoprojekt Equipment in several terms, Mr. Zecevic organized and coordinated the company marketing activities. In 2003, he transferred from the position of the assistant director of the Energoprojekt Equipment to the position of assistant of the *Energoprojekt Holding* CEO. According to the decision reached by the Steering Committee of the Energoprojekt Holding Company on December 4, 2006, Mr. Zecevic was appointed executive director in charge of marketing. In June 2009, he was elected chairman of the Energoprojekt Holding Steering Committee. Between October 2010 and May 2011, he worked in the marketing department of the Energoprojekt Holding Company. Dr. Miodrag M. Zecevic is a member of the Union of Engineers and Technicians of Serbia, and also is a member of the Belgrade Chamber of Commerce assembly.

**PRINCIPLES OF LOGISTICS MANAGEMENT AS  
RELEVANT FORCE IN ACHIEVING HIGHLY  
VALUED PERFORMANCES**

**ABSTRACT**

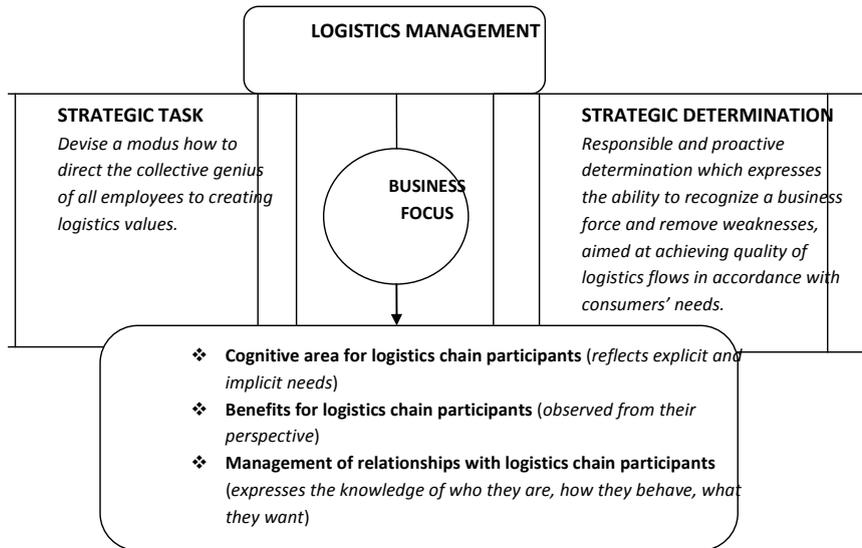
*The principles of logistics management are strategic tools of searching for transparency of the logistics function, for various forms of enquires and responses provided by the logistics management /by way of making optimal logistics decisions/. The goal of the logistics management is not, and it must never be, the tendency to replace the participants in the logistics chain; it should alter the reality by altering its own image and the image of the company's logistics function. The achievement covered by the statement given above, means fostering incentives to envisage and apply supreme logistics fluid, as a result of special knowledge of the logistics management, i.e. permanent correction of opinion and actions while facing reality. The supremacy is the matter of permanent improvement, of collecting and evaluating new ideas, related to new logistics procedure, but also with the constant improvement of the existing procedures. This is the way to establish better, lasting and more productive relationships with all participants in the logistics chain. That is the main business purpose of the logistics management. The logistics lives with the view forward, but it could be comprehended only with a view backward. Therefore it is important for the logistics management to act in harmony with the strategy principles. It is a privilege and not a sacrifice to be devoted to them. The sacrifice is just a part of logistics flows within which there are no these, highly evaluated principles, i.e. principles that support all what is considered as being suitable, and being suitable is the only thing that guarantees getting professional truth. For the purpose of the research carried out in this paper, the principles of the logistics management are classified as those that create strategy basis (the way it is formulated or formed /as a more substantial term/), and those that generate the strategy application.*

*Key words: Logistics Management, Principles of Logistics, Logistics Performances.*

## INTRODUCTION

All fields of logistics activities, within the logistics function, and according to previously formed matrix of business skills, should develop their consistent identities, as a desirable business fluid, channeled in the form of logistics values, their deliverance and their services. People, employees, and all those dedicated to dealing with logistics are the bearers of the value basis. The compound business relations should be supported by them with sophisticated simplicity meanwhile creating a responsible pattern of behavior. The logistics management should not believe in the possibility of changing employees' personalities, i.e. it should not rely on the employees who, as personalities, are subject to change. Employees just like all other people, always remain persistent to themselves. Therefore it is illusionary to create a path of *studying responsibility* for success, but to compose a team composed of originally responsible people (responsible to themselves and to others as well) who will, led by their own conscience, build up a road of logistics excellence. At this point one should not forget that what is considered as a *resource* and *obvious* in reality to the logistics management is visible in its actual size, and what has been done is reduced to the point of comprehension (adapted viewpoint stated originally by William Hazlitt). That is why the strategic determination of the logistics management is a critical measure of retaining the internal and external consumers, establishing new relationships with consumers, focusing on establishing partnership relationships, in the first phase with the *existing*, and in the following (future) / with *new* consumers (Figure 1).

Figure 1: *Strategic task and strategic determination of logistics management*



### **1. Dynamics of strategic logistics relationships**

Dynamics of logistics relations results in a measure by which the company's logistics management expresses its ability to alter the present situation and predetermines the business future to a high grade of quality. The *quality* is the outcome of a *special regime*, the point of complete professional attitude towards work; the *existence* of quality is the result of the constant struggle for new, highly positioned performances. Only the particularity of logistics products which creates and finds a market for them is the basis of its market freedom. *The particularity is a need expressed by others.* The *others*, according to the logistics management, are the participants in the logistics chain. Therefore the logistics management should focus on their consumers and maintain the course of pursuing business stability.

If the logistics management manages to envisage the future needs sooner and better than others, and bravely focus on shaping its offer that creates a possibility of satisfying those needs, it will establish a new business harmony and find a shelter that provides the business with the *leverage of power*. For the logistics managements to

grow in cognition, i.e. in accomplishing publicly expressed and revealed legitimate expectations of the logistics chain participants, it must adopt a *management platform* by using a *three-step* procedure. *The first* step refers to *defrosting* the current behavior model; *the second* step is related to building in a new behavior model (a new value system through processes of identification and internalization) in doing business; *the third* step is connected to *freezing* the newly formed behavior model by establishing market shaped rules of doing business. The value of logistics is expressed by evaluating both internal and external environment. Therefore only by adequate strategic options it could successfully communicate with the market as a part of its particular dynamics.

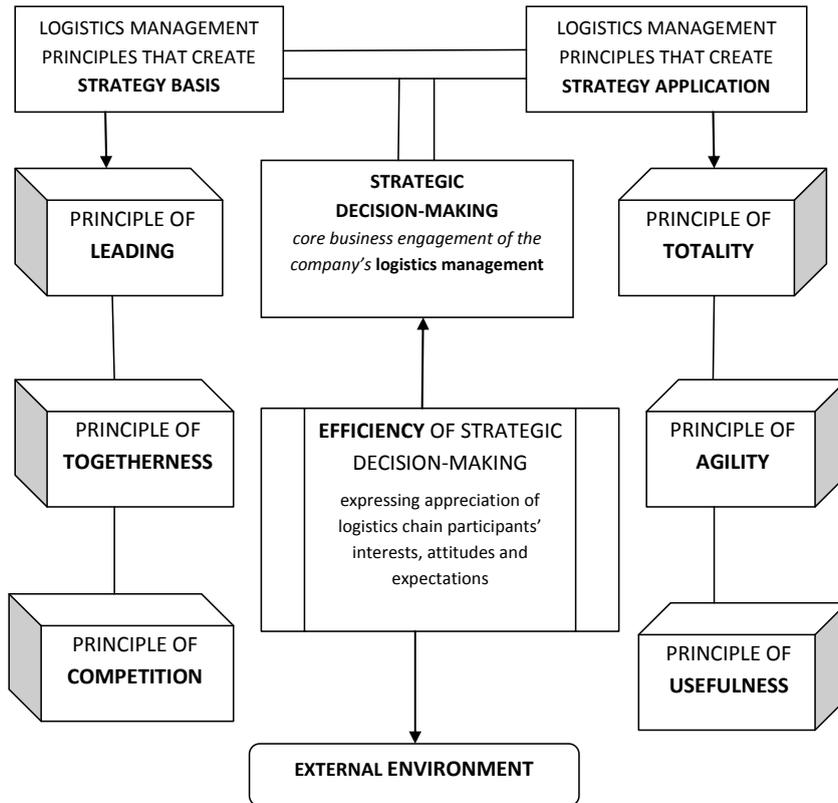
## **2. Principles of logistics management as a component of strategic logistics relationships**

The strategic determination of logistics management is stated by creating the force of competence that should be aimed at achieving logistics strategy intentions. Only the logistics management principles can be taken as tools of searching for transparency of the logistics chain participants paradigm, with various forms of enquires and responses, and in accordance with their content, *producing fuel* for generating suitable business offer. The adoption and application of the logistics management principles is the prerequisite for setting up the value *robe* of logistics management. It is never a goal, and it must never be, for the logistics management to be inclined to change business partners; it must change the reality by altering the image of itself and its own company. The logistics management should observe its target market through its business partners, by analyzing their needs, wants and requests. The superiority is the matter of constant development, collecting and evaluating new ideas, when considering new logistics methods, as well as the permanent improvement of the existing ones. For the purpose of research in this paper, the logistics management principles are classified as those that create the *strategy basis* (the way it is formulated or formed /as a more substantial term/), and those that generate the *strategy application*.<sup>169</sup>

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<sup>169</sup> Keegan J. Warren, global Marketing Management, Seventh Edition, Prentice Hall, Upper Saddle River, New Jersey, 2002, pp. 22-28 (adapted).

Figure 2 – *Classifying principles of logistics management in the context of strategy*



## 2.1 Principles of logistics management that create strategy basis

Within the stated group of principles that create *strategy basis* (i.e. formulating or forming the strategy) we will single out *the principle of leading*; *the principle of togetherness*; and *the principle of competition* (hereinafter referred to as *the first*, *the second* and *the third* principle).

*The first* principle that should be recognized and applied in the logistics flow of doing business as *generated* by the company logistics management is: *the principle of leading*, which determines the *strategy*

as a unique and irreplaceable **business concept**. *The principle* implies: a long lasting orientation of all logistics structures towards value (the structures that use proper *critical factors of success* in the process of decision making, as logically sequential activities on devising strategic approach in business); clear vision and leadership of the stated structures; and being accountable for gaining, maintaining and developing the range of business partners (both *internal* and *external*).

*The second principle* of the logistics management that should be recognized and applied by the logistics management in dealing with the logistics business is *the principle of togetherness*, which determines the **strategy** as a *primary value* for all employees. *The principle* implies: complete dedication of all employees to the *strategy* in dealing with all tangible and intangible resources, and, in accordance with that, forming the so called *strategy of togetherness*, with the purpose of *generating* what is best for the participants in the logistics chain, creating in that way what is best for the company itself. Since “only the best is good enough”, the experts would say: *optimal*. Everyone (male or female employees) *should* be a *strategist*, which is the key message of the principle, *whatever his/her job description is*.

*The third principle* that, as generated by the company logistics management, should be recognized and applied in the logistics business flows is the principle of **competition**, which determines *the strategy* as a *primary value*. *The principle* implies a continuously planned activity that will provide establishing skillful management maneuvers related to changing markets, technology and capacities aimed at maintaining the existing value of the company products, i.e. their development.

## **2.2 Logistics management principles that create strategic application**

Within the stated group of logistics management principles that compose the strategic application we will single out *the principle of totality*; *the principle of agility*; and *the principle of usefulness* (hereinafter referred to as *the first*, *the second* and *the third principle*).

*The first principle* that should be recognized and applied in the logistics flow of doing business as *generated* by the company logistics management is: *the principle of totality*, which determines the **strategy** as a **measure of balance between value and resource opportunities**. *The principle* implies: setting the balance between the determinants of value and resources while being implemented. The logistics management must have in mind that *the principle* of totality stipulates

constant reconsideration of its contents (and their durability), due to constant changes in the behavior of competitors, as well as shifts in technology and consumers' behavior.

*The second* principle of the logistics management that should be recognized and applied by the logistics management in dealing with the logistics business is *the principle* of **agility**, which determines the **strategy** as **a measure of what, why** and **how integration** should be carried out in the business process. *The principle* involves concentrating the strategy energy on: *constant monitoring of the logistics chain participants, competitive logistics structure and resource opportunities* of the logistics function (aimed at responding to the question: *What?*); *constant analyzing and synthesizing of data* related to the previous activities of the logistics management (with the purpose of responding to the question: *Why?*); and, the constant implementation of the received data by the logistics management while dealing with development activities (aimed at responding to the question: *How?*). Therefore, the principle implies to the need for constant correlation between logistics functions and the market, with the purpose of inducing proactive behavior as a consequence of analyzing the *external* environment (i.e. the analysis of *opportunities* and *threats*); and the analysis of the internal environment (i.e. the analysis of *strengths* and *weaknesses*). The logistics management that implements the stated principle will in due time demonstrate its activities not only as *reactive* but also as *proactive* in relation to the dynamics of changes (without neglecting the fact that *pro-action* often implies to *creating surprise*). In other words, the logistics management can, in a very harmonious manner, establish harmony in the *What, Why* and *How* process of doing business.

*The third* logistics management principle that, as generated by the company logistics management, should be recognized and applied in the logistics business flows is *the principle* of **usefulness**, which determines the strategy as **a measure of integrating the presence, future** and the so called '**empty space**'. This principle implies maintaining the development of attained and strategically successful logistics procedures. The logistics management must cover the *presence* by the strength of its attractive offer (i.e. to satisfy needs of the *existing* consumers of logistics services), but also to provide them with a development dimension to cover *the future* (that is to meet the needs of *potential* participants in the logistics chain). '*The empty*

*space*’ or *‘meantime*’ should be used for the promotion of technological procedures, promotion of knowledge and skills of the employed staff, as a part of both internal and external business flows, creating business partnerships, etc. The logistics management should turn its business focus towards the point of joining *the presence* and *the future* by using its core competences and distinctive capabilities.<sup>170</sup> The stated business focus marks an immeasurable degree of conscience on the importance of input and output performances, on one hand, and their comprehension and acceptance by participants in the logistics chain, on the other. This determination can potentially aid in recognizing value ahead of competitors and create an *adequate logistics strategy*.

### **Conclusion**

The principles of the logistics management, as presented in this paper, create a basis which should be used for building a suitable, and that means efficient and effective, that is optimal logistics management strategy. Only an optimal strategy can contribute to the achievement and sustainability of superior logistics performances, and by that to the achievement of competitive advantage.<sup>171</sup> That is *the key goal*. The

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<sup>170</sup> Core competences are integrated components of skills, knowledge and technology that are built into the company’s main products, and which create *a basis* of its scope of business as a business system. *The core competences* provide value for consumers (by making an actual influence on their perception of the company and its products /brands/), differentiation in relation to a competitive company (by possessing unique skills, knowledge and technology), and the ability of extending management imagination (by devising products that exceed the existing, and why not by establishing relationships with logistics services consumers). The distinctive capability, *generally speaking*, is the ability to apply the repeated *action models*, which are directed towards achieving strategic goals with means that the given company practically removes its resources from unsuitable business deals and locate them into those of good quality.

<sup>171</sup> *Superior performance* (output) is measured in terms of profit or retained earnings from investments that are above average, higher unit incomes, lower unit costs, a larger market share, etc. *Sustainability* is the time while the superior performance is being maintained. Achieving the competitive advantage depends on specific capabilities of the company. *The capabilities* are specific skills, relationships, organizational knowledge (that increases readiness to respond and promotes the superior performance) and reputation (which is based on quality and characteristics of the product, but also on effectively relayed information to customers). The capabilities are intangible and invisible assets, unlike resources that are partially tangible and partially intangible and visible assets. *The core competences* can be achieved by combining resources and capabilities. The core competences create competitive advantage only when they are applied to markets where they create value for customers, and which they view as an adding value in relationships and beyond the value of competitors.

application of logistics management principles predetermines setting up profitable business deals, feedback of values or *the value for money*; it contributes to sustainability of logistics management proactive development. In other words, the principles of the logistics management should become a segment of business culture, the foundation of its business efficiency. The business goal of the logistics management is always *mobile*, never *immobile*; modern way of dealing with logistics business is suitable only if it provides benefit to both sides (the company and participants in the logistics chain), if the phases of supreme satisfaction are being processed and constantly emphasize why something is better than the other. Principles of the logistics management are calling on business audacity and courage. The freedom lies in them, but also in those who are supposed to carry them out. *One who lacks boldness and courage should not elbow his way into the first line* (Pericles).

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Ksenija Lubarda was born on September 25<sup>th</sup>, 1983 in Cetinje, Montenegro. She finished elementary and high school in Belgrade. In 2006, she graduated from the Faculty of International Management, European University in Belgrade. In 2008, she completed the Master studies of International Management. After completing her undergraduate studies, she was employed by the Hyatt Regency Hotel. Upon starting her job with the hotel, she underwent a specialized training program of getting familiar with functioning of all departments. After that, she decided to take a position with the Sales and Marketing Department, where she is still employed. In 2009, she was awarded the title of the best employee of the year. Ms Lubarda completed the following training programmes with the Hyatt Regency Corporation: Cairo Smart Selling III – Advanced Selling Techniques, 2010; Kiev, Smart Selling II – Selling Processes, 2008; Belgrade, Smart Selling I – Administrative Skills, 2007; Beograd, Service Excellence 2 – Dealing with Complaints, 2007; Beograd, Hyatt on Skills – Train the Trainer, 2007; Beograd, Communication Fundamentals, 2006. She specialized in the following programs: Lotus (IBM); Opera; Delphi (hotel administrator); Ideas.

## **INNOVATION MANAGEMENT AS RELEVANT SEGMENT OF HOTEL TECHNOLOGY TRANSFER**

### **Abstract**

*Hotel product represents the essence of hotel business in the hotel market. Its specification, within the instruments of appearance in the market, points to the necessity of obtaining the support of other elements: price, promotion and sales canals. The management of hotel products assumes the management of preservation and improvement of their results. The management has to understand present and future needs of the residents, businessmen and tourists; it has to satisfy them*

*and to excel with the quality the expectations of the hotel consumers. The aim which can be accomplished by such business behaviour is the trust that the offered (delivered) hotel products are the goods which, in the stated categories of the hotel consumers, constantly offer value. These attitudes target, not only the existing but also potential hotel consumers. The existing, because of generating the continuous flow of demand for the hotel products, and potential – to create additional demand and the new sales. What the hotel product should target is providing the hierarchy of value for the hotel consumer. This aim is accomplished by projecting the hotel products: the essence of profit, basic, expected expanded and potential products.*

*The hotel management should focus its efforts towards creating the set of products, the assortment of products, stated in their width, depth and consistency. The width of the assortment means how many different integrated hotel products are there (for example, hotel product which has all the levels of the product / except the potential / and is meant, exclusively for business people /Business Hotels /; hotel product which has all the possible levels of the product / except the potential /, and is exclusively for tourists /Resorts Hotels/); With the width of the assortment, by the rule, you can provide the expansion of the hotel offer. Depth of the assortment means the average number of products within the framework of each group of products (for example, within the resort hotels, it is possible to distinguish: hotels which promote sport / horse riding, golf, hunting and fishing/ as the essential additional segment of the value in their offer; Hotels which promote set of educational programs /foreign languages computer skills/) as the essential additional segment of the value in their offer. With the depth of the assortment you can provide certain patronage over the hotel consumers. Consistency of the assortment means the level of interconnection among different aspects of the assortment (barring in mind the costs, business resources, etc); With the consistency of the assortment you can provide, by the rule, the building of the image of the hotel.*

**Key words:** Innovation Management, Hotels Product, Transfer of Hotel Technology

### ***Introduction***

The king assigns certain rights and privileges to the barons because otherwise he would not be able to reign in his kingdom. The power of barons in the territory came from the king, but in practice, the king was often controlled by the barons (the original inscription – **K. Boulding**)

A hotel (hotel management) assigns certain rights and privileges to the hotel consumers (hotel guests) because otherwise it would not be able to manage its business. The power of the hotel consumers in theory came from the hotel, but in practice, the hotel was often controlled by the hotel consumers. (Modified inscription – **K. Lubarda**)

To make innovation of the hotel products is sui generis business need of the hotel. Innovation is the way to differentiate the product (functionally and emotionally), and to differentiate is the way to a successful business results. Innovation means its participation in the management. The new attitudes and approaches to hotel business are the management of innovation with high performances. For example: decision to constantly evaluate and improve results according to the expectations of the hotel consumers, by answering appropriately the following questions: Are the results always above the level of the appropriate products? Do we make the best out of the opportunities to excel the desired level of the product? //decision to, while creating and selling the hotel products, surprise the hotel consumers, by appropriately answering the following questions: Are the employees aware that the creation and sales of the hotel products is our unique opportunity to excel the expectations of the hotel consumers? Are we taking certain special steps towards accomplishing something extraordinary? //decision to sell new hotel products for the first time, the way they should be sold, represents the greatest priority, by appropriately answering the following questions: Are our employees trained and awarded for providing the hotel services without a single mistake? Do we regularly evaluate the form of our hotel products in order to spot and correct possible mistakes? //decision to communicate in an efficient way with the hotel consumers, by appropriately answering the following questions: Do

we periodically get in touch with the hotel consumers in order to spot their needs and inform them that we appreciate their cooperation? Do we train our employees and ask them to show to the hotel consumers that we care for them and that we appreciate them? Etc.<sup>172</sup>

The quality of the hotel products is relevant field of hotel management's business dedication. Quality includes the position of the hotel product seen with the eyes of the hotel consumer, which determines their functional specific features (quality of the performance) and emotional specific features (quality of the design). What is distinguished as the quality of the hotel products is determined by the following:

1. The quality will exist only to the point where the hotel product satisfies the need of the hotel consumer;
2. Hotel products of high quality can be produced only with the installed quality of the hotel business in general;
3. The costs of the hotel products of poor quality devalue the costs of the products of better quality:
4. Quality of the hotel products must be protected, maintained and developed.<sup>173</sup>

Quality of the hotel products became the paradigm of competitiveness, the most important market factor. Quality is the answer to the question: how to turn vision into reality, reality which brings benefit to the hotel consumers? The answer of the hotel management to the first word of the question – how – is supposed to be: by doing things continually in the best possible way. To accomplish high class business in the domain of creating and selling the hotel product, hotel management should use the strategy of total quality management - TQM<sup>174</sup> which represents the key to accomplishing perfection in business, perfection in performances of output. Dedication of the hotel management to the shaping of the quality of the hotel product, but also to the quality of communication with business partners, hotel consumers, in the first place, is the first step toward creating high-class business. It must be emphasized that hotel consumers expect that hotel products have the verified quality, i.e. that all hotel products

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<sup>172</sup> Berry L.L. and Parasuraman A., *Marketing Services: Competing Through Quality*, The Free Press, New York, 1991, pp. 72-73; adapted context.

<sup>173</sup> Teare R. and Boare A., *Strategic Hospitality Management*, CASEL, London, 2001, p. 153.

<sup>174</sup> TQM or his part in literature and in positive business practise are known as: TQ-total quality; CQC-company quality concept; CQI-company quality improvement; TQC-total quality concept.

should be identical in time and space, and that they should reflect promised specification of their offer. Management should always bear in mind the statement, given by the famous politician: Do not make small plans, especially never make small plans with quality.

### **1. *Definition and specific features of hotel products***

Hotel product, essentially, represents a complex interaction between hotel staff and hotel consumers, and business success of a hotel is determined by the quality of this interaction. Quality of the interaction can be supported mostly by decision of the hotel management build in its business approach holistic market technology. This technology has three segments: external, internal and interactive marketing.<sup>175</sup> External marketing is referring to the focus marketing of mix; internal marketing is referring to the focus of training and motivating the employees, with a purpose to accomplish professionalism and quality of the delivery of hotel products, during the process of creating and selling the product: interactive marketing is referring to re-establishing the skills of the employees in the process of selling the hotel products to the hotel consumer (hotel consumer observes, not only the technical quality of hotel products, for example if the hotel room met their requirements, but also the functional quality, for example, if the hotel staff was helpful during their stay in the hotel, if the staff was inspiring confidence and so on). Technology provides the increase of productivity in the process of creating and selling the hotel products (for example, checking in and checking out the hotel with the help of the computer), but it is also important to maintain the high level of quality of communication with the hotel consumer. By improving the productivity you should not allow the decrease of the expected quality of the hotel product by the hotel consumers.

Hotel product must possess its personality in order to re-establish its brand in the mind of the hotel consumers. In other words, it must represent a mixture of human attributes. The following five attributes, which represent certain valuable segments of personality, hotel consumers see as desired valuable segments of hotel products:

1. Sincerity (realistic, fair, good and cheerful)
2. Excitement (daring, passionate, imaginative and modern)

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<sup>175</sup> Gronroos Ch., *A service Quality Model and its Marketing Implications*, European Journal of Marketing 18, No 4, 1984, pp. 36-44.

3. Competence (reliable, intelligent and successful)
4. Sophistication (high-class and charming)
5. Ruggedness (have an open mind and be a survivor)<sup>176</sup>

The main specific features of the hotel products are: intangibility, inseparability, heterogeneity and inability of storage. The above mentioned specific features cause certain questionable situations which the hotel management should solve by making adequate strategic decisions and by carrying them out.<sup>177</sup>

Hotel product with its usability and value makes the profile of the main features which represent it. Usability of the hotel product means to satisfy the needs of the residents, businessmen and tourists, according to the real offer in the domain of accommodation, food and drinks and convenience of the stay. With the usability of hotel products the business results of all the functions of the hotel are manifested in the most direct way. Value of the hotel product is determined by quantity and especially by quality of the work needed for its accomplishment, and the quality of the hotel product itself makes its value greater or smaller. The main characteristics of the hotel products are: usefulness, stability and ability to evolve. Usefulness of the hotel product is the feature of how it can serve a specific purpose. Stability of the hotel product is the feature of its durability and reliability. The ability to evolve of the hotel product is the feature of the need for its constant changes in the purpose of adjusting to the new needs of the hotel consumers.

Hotel management must create strategic algorithm, and the results should be a hotel product of high standard performances. Strategic algorithm has four phases:

1. Identification of the potential (defining a hotel market/hotel segments, hotel niches/development of the idea)
2. Design (concept of development of the hotel product and strategy development)
3. Testing the hotel products (with the support of promotional activities in the hotel market)

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<sup>176</sup> Aker Jennifer, *Dimensions of Measuring Brand Personality*, Journal of Marketing Research, 34, August, 1997, pp. 347-356; adapted context.

<sup>177</sup> Bakić dr Ognjen, *Marketing in tourism*, Faculty of Economics, Belgrade, 2000, p. 224.

4. Introduction of the hotel product (planning the introduction actions and physical presence in the hotel market).

## ***2. Innovative activities of the hotel management/hotel company***

The needs of the hotel consumers are constantly changing, and will change. From the hotel (business, tourist) the following is expected: hotel accommodation units with high technology; better security and safety of the stay; creation of the experience brand of the hotel consumers; accommodation units for non-smokers, as a standard; environmental awareness; informal and healthy food; the existence of different types of hotel restaurants; different forms of recreation and entertainment; providing transport for the hotel consumers; meeting the needs of disabled hotel consumers; etc.

Hotel accommodation units with high technology. Ideally, hotel rooms should be like those we have at our home. Unfortunately, the world of the hotel rooms is rarely ideal. Researches, done by many hotel corporations, point to the need of spreading and enlargement of the “room” technology. Hotel corporation Marriott Hotels made a large study on businessmen who travel, and according to that, developed a concept of the room for their needs, so called “Working room”. It is a functional room, designed to reflect a business atmosphere with a programmed space for PC with fax, modem and telephone. Hotel corporation Holiday Inn made a research, coming from this basic assumption: What makes the hotel consumers feel comfortable? Results of the research show the following: spacious bed, room with lot of day light and modern electronic devices – highly specialized integral CD stereo units, multimedia RV receiver, computer games and number of books on CD. To a regular observer it can be forgiven if this is considered as too much. However, technology in rooms is a crucial factor if you want to accomplish competitive lead. Businessmen, as the hotel consumers, must be provided with the same possibilities he has in his working environment. Meeting the real needs, designing the hotel products in this sense, also means the Internet access from the rooms. Winterm model gives the hotel consumers the fastest Internet access possible: gives them the opportunity to receive and send their e-mail, to read the reports from the stock market or other business reports, or to surf

World Wide Web. They use, so called T-1 lines, which are 50 times faster than telephone lines. Researches show that hotel consumers are willing to pay for this type of Internet access even \$20 per hour. Certain, large hotel corporations, have their Internet sites for a long time. For example, hotel Corporation Hyatt Hotels on its web site offers: detailed hotel guide, attractive interiors of their hotels, possibility to have different gatherings there, possibility to make a reservation of accommodation units, information package. Web site, also offers several unique marketing tools, for example "Hot lines", where you can find an attractive person with a discount, offers made according to the financial means of the hotel consumers, etc. This corporation introduced a new technology, designed to help businessmen as the hotel consumers even before they arrive to the hotel. Hotel consumer checks in using the so called tool-free telephone numbers. After 11 o'clock, on a day when he is supposed to arrive to a certain hotel, hotel consumer makes a room reservation, gives his credit card number and immediately gets the room number where he is staying. When a hotel consumer arrives to a hotel, he enters a special check-in area, where he can simply show his card and get a key for his room. Hotel Corporation Westin Hotels promoted Westin room 2000, specially planned and designed room for businessmen, "office away from the home environment". The room has a section for recreation and preventive medicine, jacuzzi (small therapy bathroom, i.e. around bath tub with a device for the circulation of water) and other features. (This corporation is known for making brand out of components, i.e. creating the value of a brand for components which are the segments of the structure of the products which is a brand) For example, Westin Hotels advertise their heavenly beds and heavenly bathrooms. The first campaign was so successful that the Westin Corporation now sells their beds, pillows, linen and blankets through on-line catalogues, along with other heavenly gifts and bathroom equipment.

Similar effects were achieved by hotel corporation Hilton International, where the rooms for businessmen, have audio-visual system, built into a, so called multimedia wall, as well as other business equipment in vicinity (photo-copier and other) Hotel management of the Shilla (de lux category) in the capital of the Republic of Korea (South Korea), Seoul, gave the opportunity to the members of the hotel club to use the new computer system, designed

to make it easier for them to arrange their business meetings. Photograph library made of 20 000 three-dimensional pictures, helps the hotel consumer to decide the configuration of the room, equipment and service (menu). Offer within a hotel room is becoming more sophisticated, these days. It is calculated that the strategy of “the benefit from the whole product”, which can also come in the form of the free of charge overnight accommodation, is cheaper than simple reduction of prices, and it gives more to the hotel consumer.

Raised security and safety during the stay. To satisfy the functional (physical) needs of the hotel consumers is the primary goal of the hotel. However, the researches show that it is very important to meet their emotional needs as well. These needs are, perhaps, the best described as general feeling of calmness, relaxation and peacefulness with the surrounding. Hotel consumers want to feel safe and sound in the hotel where they are staying. Peace of mind is the primal human need, a need which emerges as the basic one, along with the food and water. According to that, hotel has to design its products. It can be achieved by installing security cameras, better lighting in the hotel corridors and parking lots, better security personnel. Hotel security personnel must act secretly, it has to be invisible for the hotel consumers, but always ready to react.

Creating the brand out of the experience of the hotel consumers. As we have already emphasized several times, but we are going to repeat it because of the context, hotel management must cherish the relations with the hotel consumer. By cherishing the relations you also keep the hotel consumers loyal. Loyalty is the result of not just doing many, but rather doing little, but effective things, details – which can breathe in the soul into the harsh life. “Joie de Vivre Hospitality Inc., has a chain of small hotels, restaurants and resorts in San Francisco. The unique setting of each building, imaginative details and thematic style, are often in the popular magazines. For example, Hotel del Sol – rearranged motel with the yellow exterior, surrounded by palm trees and colourful lights – is described as “if Martha Steward is meeting the Islands magazine.” In the two hotels in the Silicon Valley, hotel consumers can get an Internet connection in their rooms and at the swimming pool. With the help of the concept of the boutiques, hotels can offer a personal touch – to put on the guest’s pillow a vitamin instead of a chocolate.” Specific type of turning the experience into a brand can be found in

Ritz Carlton Hotels. This group of hotels shows that you can use the experience of the hotel consumers by telephone communication. Executive managers of the group “train the employees to answer the telephone calls in a very short time, not to wait for a telephone to ring more than three times; they should answer the phone in a pleasant voice and they should know everything about the products which the hotel makes and delivers.”

Non-smoker’s accommodation units, as a standard. It is a well known fact that there is a big campaign against smoking, everywhere in the world today. Of course, it is difficult to estimate its positive effects. In any case, the hotel management must bear in mind the fact that the hotel is “an oasis, refuge, a fairy tale corner” for hotel consumers, and according to that a hotel management has to direct their business activities towards creating non-smoking rooms, if they want to keep or create the image of that kind.

Environmental awareness. Hotel consumers have become significantly aware that you cannot neglect environment. In this field, the hotel corporation Inter Continental, published in 1989. the first manual of that kind in the hotel industry, and shortly after that, applied extensive, complex program for the protection of the environment in the vicinity of their hotels. International organization of hotelkeepers established, in 1991 the award “Green hotelkeeper and the revival of the environment, whose sponsor is American Express. Development of environmental awareness, supported by this award, got a big importance. Management of Maurya Sheraton Hotel in Madras ( India), made a decision to use the hotel funds to plant, annually, 1632 trees, with the help of the children from local schools. They also promoted that the food should be collected and then distributed to homeless people in the city.

Informal and healthy food. It is a growing tendency that the hotel consumers decide to have informal, diverse and healthy food (vegetarian, macrobiotic). By not adjusting to this, hotels can have less number of hotel consumers. Hotel will never become what it should become, by remaining what it is now.

The existence of different kinds of hotel restaurants. Hotel consumers like diversity. They like different restaurants. What leads to their positioning within the hotel offer are: restaurant products of high quality, restaurant staff of high quality, one-firm approach, i.e. solid products for all the segments of hotel consumers, giving the

unique solutions for every consumer's need, integrity (holding to personal and professional standards), etc. All that's less than conscious obligation towards what's important, represents unconscious obligation towards what's not important.

The existence of different forms of recreation and entertainment. Sports and entertaining activities, by the rule, should be added to the stay in the hotel, as a convenience which would make it more attractive and its offer more wide ranging. The most profitable form of recreation in hotel industry, economically speaking, (except tennis, squash, horse riding, etc) is golf. There are over 70 million people in the world playing golf today. Playing golf is a recreation, sport, enjoying in the nature, actively spent time in the outdoors. It is a place where business talks are held, meeting place for people from high society, an entertainment for the entire family. Forms of recreation within the hotel itself could be different programs for exercising in the gym, using the hotel swimming pool etc. Strategy of designing the hotel products, as the origin of the business policy of the hotel management, should include the following segments of the consumers (more demanding, with specific needs): women, older and younger people, businessmen and tourist from the Middle East and Asian –Pacific area.

Transport of hotel guests. With a constant growth of functional and emotional values of the hotel products, it is getting more difficult for the hotel management to distinguish its product, to make it different, and use its uniqueness to confront the competition. This particularly refers to the hotels with the well-off clientele. Bearing that in mind, wise hotel managers adjust their hospitality policy, in order to spread their apprehension of connection with the hotel consumers, even before they get to the hotel. One of these domains of manager's engagement is to provide transport for the guests of the hotel. Transport is generally limited to a local level. In Europe, it is difficult to find a hotel which offers transport, except on special requests, ever since the public transport and taxi have been available. However, hotel consumers, who arrive by plane, really appreciate transport from the airport. After a tiring flight, and the usual problems with travel formalities and baggage, most of them don't feel like getting into the fight for the bus or taxi. Managers of many hotels spotted this, and put this element into their offer. The aim is to save the time and energy of the hotel consumers. For the guests of Inter Continental's club "six

continents”, airport transport has been a usual practice for a long time. Driver in a uniform is waiting for a guest, takes his baggage and drives him in a luxurious limousine directly to the hotel. This offer often has a supplementary dimension: driver takes the keys of the guest’s room at the hotel reception, so that the guest can spend only a short time in the reception hall (just to give his passport), and to go directly to his room. Although this offer does not spread the business it has a positive effect on the guests and increases their loyalty towards that hotel. Hotel management should always try to discover the hotel guests’ needs and to understand them. They will know how to repay them for that effort.

Meeting the needs of disabled hotel guests (disabled facilities). People with certain physical disabilities also use the hotels. Every hotel, with a good business, must find a way to meet the needs of these people, by providing a safe way to enter the hotel for people in wheelchairs, etc. space for a wheelchair is necessary for using a bathroom in a hotel room. Bathrooms are usually on the left or on the right side when you enter the room. The direction in which the door is opened is also very important: push or pull. If you have to push the door, it is a better solution. The space in the bathroom itself is also very important: wash basins should be on the appropriate height, with a free space bellow, toilet paper holders and towel holders should be accessible from the sitting position for these guests, etc.

Contrast in colour between floors, walls and furniture, are very important for people with impaired eyesight, as well as the lights and the mirrors. It is important to say that giving services to this kind of hotel consumers should represent a part of a higher level of training of the employees. Such program for readjusting the space and training the employees, is definitely profitable investment, and the hotel gets an additional value by representing, in a certain way, a thought that a balance is not “either this or that”, but that a balance means “both this and that”.

### ***Conclusion***

Hotel market is diverse, both from the point of view of the offer and demand. Diversity of the offer of the hotel products comes from the differences in what is offered (hotel products and their specific features) and differences in the ways in which the products are offered (promotion, sales canals). Diversity of demand comes

from the differences in needs, attitudes and ways of reacting of the hotel consumers to some elements of the offer. These reactions are the imperative for the hotel management to direct their actions, their finances and personnel towards realizing transformational changes, and all that helps in increasing the effectiveness. It is advisable to initiate these directions in situations when the position of a hotel is positive in the market. Obstacles for initiating development are then less numerous. Hotel management should perform constant differentiation of the hotel products, no matter how perfect they are. It is important to begin, to initiate willingness to make small improvements, but such improvements that would be noticed by the hotel consumers. Hotel staff becomes, in that context, the first and the most important source of the additional quality. You can never get enough training. Elements of the hotel products of high quality in the field of hotel keeping mostly never change: warm smile, good attitude, and dedication to the work you are familiar with. But to achieve high standards in staff training, hotel management must create a program of innovations, as a starting point of a strategy for designing hotel products. Three basic techniques, according to our opinion, should be present in that set of training: 1 Try to think as a hotel consumer 2 make new teams 3 improve skills and abilities.

1. Try to think as a hotel consumer. People working in a hotel put themselves in the position of a hotel consumer, in order to learn to recognize and rate the value of the hotel product of a good quality. A hotel employee gets a form from a certain hotel department, where he can find a list of questions about the essence of the hotel product. Then he goes to another hotel, which represents a competition. Questions in that form could be, for example: When you get out of the taxi and see the hotel, what is your first thought? Do you feel welcome when you enter the hotel lobby, or do you feel lack of trust? Who approached you first? Person of what rank? Would you be willing to spend 10 000 to 20 000 dinars per night in such hotel? This experience can help you to realize what is the attitude of a hotel consumer and it can help you to put innovations (for example, better relations with hotel consumer) into design of the existing hotel products.

2. Make new teams. Hotel staff should learn to like the changes. There is no manual to tell you how to achieve that immediately and completely. You can handle every change, even in the main business. In time, monotony in business causes a decrease in

productivity. Hotel management, by proper perception of the problem, can lessen or completely eliminate this. Staff should be offered something new, without going into their existing budget. It can be a new job, new engagement, which doesn't have to be closely connected with their profession, speciality. We are going to present an example which supports this. Marilyn Karen, general manager of Toronto Holiday Inn, created a strategic assumption with an aim to constantly keep the hotel open for the events in the city and around the city. She came to an idea to send a number of her personnel to a school for clowns, which would provide entertainment for the guests of the hotel and create certain publicity. Employees of that hotel learned in that school how to make animals from the balloons, to juggle and perform tricks. Further more, Marilyn made, so called clown alley, an official group of 28 members. It was a wonderful way to cement the trust, connection and openness of the hotel staff.

3. Improving skills and abilities. There is no end for the hotel staff in the process of learning. The world is changing. Hotel consumers are changing. Modern technology offers many suitable programs for giving attention to hotel consumers. This technology brings the participants of the hotel program (hotel employees) into simulated particular situations, so they can learn how to deal with them and avoid stressful situations with hotel consumers and among themselves. It leads to a better quality of hotel products and to a satisfied hotel consumer. Every procedure brings something new which is the consequence of that.

Hotel management should know the psychology of hotel consumers. To start from the empirical facts that you pay the most for the best quality, that the hotel staff is particularly motivated by creating and delivering hotel products of the supreme quality, but also to be aware that the design of a hotel product of a good quality is in every moment endangered, because those who come forward with something new, constantly change and make transformations for the hotel consumers. Tom Peters, in his work "Successful in chaos", emphasizes the main element of management's dedication to make hotel products of good quality. Starting today, never pass next to a bad product just like that, without any comment, without doing anything;

never do that again<sup>178</sup>. To train hotel personnel should be the key to everything. Every person employed in a hotel should be trained to master technologies for evaluation of quality, each of them should analyze causes and consequences of the problems. In Japanese management there is an axiom: controlling the quality starts with training and ends with training. Only specially trained hotel employees can create and deliver hotel product of a good quality which aims in medias res the sense of the hotel consumer for perfection, aims the way they experience it. Quality is the expression of the need of the hotel consumer, not the expression of what the hotel management estimates as satisfying in the hotel offer. Hotel product is, according to the ring like scheme which was presented by Theodore Levitt ( in the Total Product Concept), expressed as generic (usual, traditional, expected, enlarged and potential, as it was already stated. Business orientation of the hotel management to invoke success, can be re-established only in relation enlarged – potential hotel product. It is particularly important to keep emphasizing, all the time, intangible values of the hotel product, which are powerful lever in building the market positioning of the hotel; the greatest number of decisions when buying hotel products are made by an access to intangible and invisible.

It is impossible to design a hotel product without being closely connected with hotel consumers. In hotel business nothing is so difficult as this, but also so valuable. Hotel consumers are arbiters of the quality of the hotel product. When they are satisfied it means that the hotel product met or excelled their expectations, and when they are dissatisfied, it means that by using a hotel product they got less than expected. When the hotel consumers are satisfied the level of their trust in the value of certain hotel product is elevated (which practically results in buying the same product again) and in positive oral propaganda about the product's performances (in the family, among friends); the result can be , potentially observed in the flow of the new hotel consumers. The process of doing business in a hotel, means constant communication with the hotel consumers about the existing process of creating and delivering hotel products, and on the other hand it means to improve (new design) the process of creating and

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<sup>178</sup> **Piters Tom**, *Successful in chaos*, Business system Grmeč, Belgrade, 1996, p. 103.

delivering hotel products. Professional reaction, supported by additional value, to the difficulties of the hotel consumers that come up unexpectedly, often turn enlarged hotel product into potential, into product whose value is invaluable at the specific moment, but also in a long-term time perspective.

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