



## **THE IMPORTANCE OF KNOWLEDGE MANAGEMENT IN ORGANIZATIONS – WITH EMPHASIS ON THE BALANCED SCORECARD LEARNING AND GROWTH PERSPECTIVE**

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### **Abstract:**

*This paper is aimed to show the great importance of knowledge as a vital strategic resource for modern business, at the beginning 21st century. The turbulent business environment, with global trends and the stringent competition in the world market resulted in the significant changes that companies should introduce in their current business operations. The changes are necessary for survival in the market. The companies should adapt to changes in the external environment and make changes in the internal environment in terms of innovation, increasing competitiveness, employee training, increasing flexibility, improving processes and business performance. In a “knowledge economy”, the intangible resources are significant resources that add the value. Since the most business processes are viewed through knowledge management, the real challenge, therefore, is developing an adequate system of knowledge management in companies. How much is the importance of knowledge transfer through organizations, it is confirmed by Balanced Scorecard - learning and growth perspective. Its main goals are to raise skill level in performing internal processes, harmonization among employees and companies’ objectives, improving information systems etc. To increase and maintain the value of intellectual capital, companies invest in education and continual training of its personnel, establish a system of grading employees and their performance, reward and promote quality staff. Obviously, there are the difficulties in carrying out modern systems, especially in developing countries, which include the Serbia. However, there is real hope that local companies will soon experience all the benefits of new systems in practice.*

*Keywords: The organizational knowledge management, Balanced Scorecard (BSC) system, the BSC learning and growth perspective.*

## **1. INTRODUCTION**

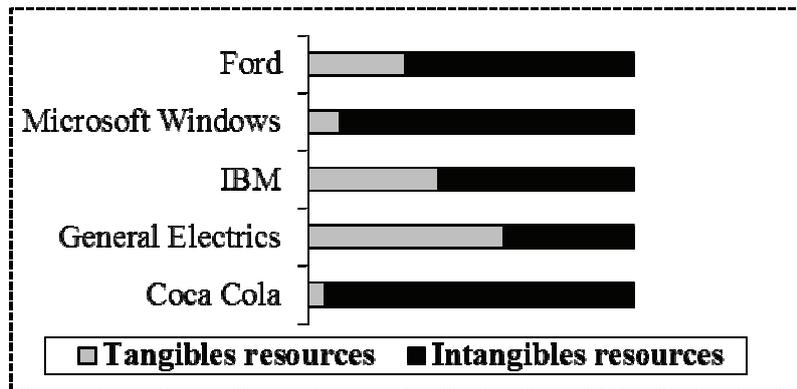
Peter Drucker said that today knowledge has power because it controls access to opportunity and advancement. Twenty-first centuries is undoubtedly the century of knowledge. The everyday usage of available advanced information, business and internet technologies in business activities confirm that this is not only a phrase from the literature, but true reality. The globalization has brought many modern trends, and companies have the task to adapt them as quickly, easily and painlessly they can in order to survive in the competitive market. The vital strategic resource today is the knowledge – individual and organizational. By realizing the major value of intellectual resources, companies have begun to manage rationally and improve them. Hence the importance of knowledge management as a concept of organizational knowledge, aimed at effective application of knowledge to make quality decisions. In this concept, people have a central role. Intellectual resources, and the first place knowledge, contribute to the company as a revenue contribution of products and services, preserve and increase the reputation, through the reduction of operating costs, create barriers to entry of potential competitors, by increasing customer loyalty and create innovation. The success of organizations largely depends on continual investment in learning and acquiring new knowledge that creates new businesses and improve existing performances. In that processes, the balanced scorecard as a strategic managerial tool provides the enormous help.

## **2. THE ORGANIZATIONAL KNOWLEDGE AS THE KEY FACTOR IN MODERN COMPANIES**

In the light of globalization and modern business, the companies are exposed to the challenges posted by unpredictable and complex competitive environment. The globalized business environment is characterized by changed business conditions, market liberalization, high production, information and communication technology, flexible organizational structure of companies and partnership development. In such an environment, the competition among companies is sharpened in the market (Novicevic & Jelenic, 2008, pp. 137–146). The companies are forced to innovate and develop new techniques for improving the quality and functionality of products, reduce costs and, of course, the answer to the increasingly sophisticated customers' demands in order to survive in the market.

The changes in the nature of business, the shift to "knowledge economy" and the new information age brought new resources that companies use in business processes. In the era of industrialization, companies have created value by the physical transformation of tangible assets (land, buildings, equipment and supplies) into the products. Contrary of the industrial era, in the era of IT, the value of physical "intangible" resources significantly increases and "intangible" assets are becoming a major source of competitive advantage (Mitrovic et al., 2008, pp. 339–346). The companies-leaders, which care about their high business performance, have realized that the market value of their property increases with greater participation of "intangibles" (intellectual) resources in relation to tangible property. In the period of the 80<sup>th</sup> years of the last century, the large number of companies' property (60 %) was tied to tangible property, and the rest was related to the intellectual resources ("intangible" property). Today, the situation has significantly reversed. The global trend has caused that the company' value is largely associated with the "intangible" assets (80 %). The relationship among tangibles and intangibles resources of the world's best-known companies is shown in Picture 1 (Antonic, 2005, pp. 77–82).

**Picture 1:** The approximate relationship between the tangibles and intangibles resources in worldwide companies



Source: Adapted from Antonic, 2005, p. 80.

In a knowledge economy, "intangible" resources are the decisive factors of business success. The modern company recognizes the most business processes as a process of knowledge. Therefore, knowledge is considered a strategic company's resource, the source of competitive advantage and business success. In the "knowledge economy", the focus is on the data, information and knowledge as the most important organizational resources. Since the physical, organizational and human resources are limited by availability and price, there is a need that companies' manage them rationally and build a responsible approach to the market. Beckman (1997) found that the knowledge is way for understanding all about information and data to actively enable performance, problem solving, decision making, teaching and learning of others. Nowadays, one successful company has the ability to learn faster than others, to change, and gained experience quickly turned into action. By this, the organization provides an advantage over competitors, and indeed, survival in the market (Trninic, 2008). New knowledge that the companies converted to a commercially applicable knowledge can increase their competitiveness by 70–80 % in global business conditions.

For evaluating the real value of the company, its stability, possibility of survival and development, it is not enough to observe the company only through its physical assets and financial strength, (i.e. financial and monetary power), as suggested by the top managers and experts. This influenced to the companies to identify and increase the transparency of "intangible" resources, to promote the intellectual capital and corporate knowledge through professional development, continuous training and education, with the development of information technology support. The most valuable "intangible" assets are related to relationships with customers, employees and their skills, knowledge and organizational culture aimed at innovation, problem solving and general business improvement. By the process of constant knowledge renewal, it is possible to create and add value thus increased the commercial transfer of skills and knowledge in applied experience.

### **3. THE AIMS, ABILITIES AND IMPORTANCE OF MANAGING ORGANIZATIONAL KNOWLEDGE**

Generally speaking, the knowledge management is the process through which organizations generate value from their intellectual capital and knowledge-based assets. Usually, the value is obtained by finding what employees, partners and customers know, and sharing information with employees, departments and even with other companies, in order to find best practices. For companies is the most important to understand 'what they know'. This knowledge is

contained in databases, research and development activities, competent staff and quality products that are supplied in the market.

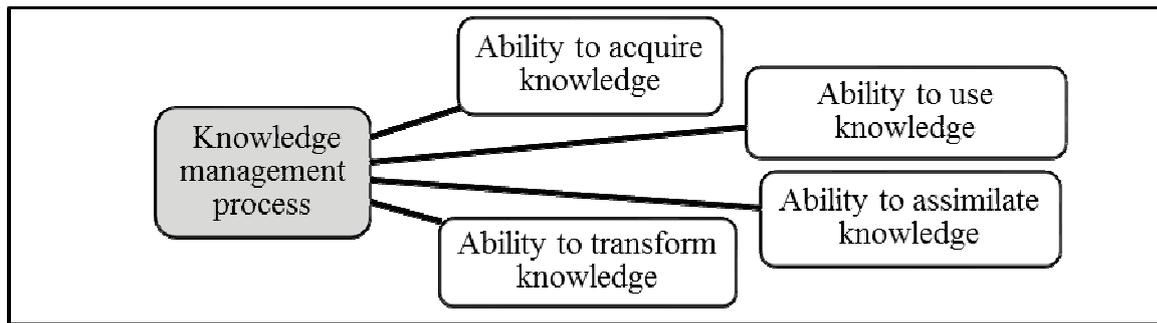
The knowledge management process is an everyday business process within the company, with major role in transfer of relevant information for decision-making across all levels of structure and corporate governance. The ultimate result of well-created process of knowledge management is that every employee in the company fulfils its mission, which reaches the corporate objectives and strategies, and identifies the most valuable knowledge from the “sea of information”. It is not an easy task because it involves the management structure at the highest levels of management. They are responsible for the processes of finding, selecting, organizing and presentation of information in a manner that promotes understanding of employees in a particular area of interests. Knowledge management is important as a managerial tool, which promotes the creation of new knowledge and it’s sharing through the corporate values. Managers need to have a greater sense of invisible and intangible assets of people, featured in the minds and experiences of employees. Without these assets, companies are unequipped with vision and ability to predict the future. The using of knowledge management process increases the effectiveness of decision-making processes, as well as the level of operational efficiency, flexibility, commitment and involvement of employees.

Knowledge management is not only associated with managing knowledge as a resource, but also to manage business processes that take place using that resource. It should involve the analysis of existing knowledge as a resource, as well as defining the objectives regarding the generation, protection and application of new knowledge, then transfer, exchange and dissemination of knowledge, effective use of knowledge and performance measurement. From external sources, the knowledge is generated by purchasing technology and software, hiring experts, using consultants and strategic partnerships. Internal creation of knowledge is a process of individual learning in a group of individuals as well as the process of "organizational learning". In both cases, the key role is on the company’s (organizational) units of research and development and on the units in charge of education and training of employees (Krstic, 2007, pp. 53–66).

The knowledge management process aims to support innovation and encourage the free flow of ideas through the company. It helps increasing revenues (because the products and services are delivered to market faster) and reducing costs (because it eliminates redundant and unnecessary business processes). This process increases the time that employees spend in the company, because their knowledge and efforts are valued by the system of rewards. Ultimately, the knowledge management process increases the value of the company and its competitiveness as a whole, because it increases the efficiency and effectiveness, the relationship of all resources and innovation (Tisen et al., 2006, p. 47).

In the knowledge management process, there are four main abilities that refer to skills acquisition, assimilation and transformation of knowledge, and ability to use and exploit knowledge (Zahra & George, 2002, p. 191). They are illustrated on Picture 2.

**Picture 2:** The main abilities in the knowledge management process



Source: Adapted from Zahra and George, 2010, p. 191.

The creation (or acquisition) of knowledge involves market research, product, services and process research and development and strategic partnerships. The purpose of the knowledge assimilation is using the knowledge in the right way, which reduce gap between the knowledge that is needed and the knowledge that is currently available. The transformation of knowledge includes the ability to round up a set of knowledge that was previously segmented and disjointed, or to combine elements of knowledge in new ways. This process aims to create an entirely new knowledge, providing fresh ideas for further application of knowledge and new solutions to meet market needs. The connection between knowledge assimilation and transformation is particularly important because the greater assimilation of knowledge, knowledge transformation can be done more effectively (Swan et al., 1999, pp. 262–275). The ability to use knowledge includes the company's ability to incorporate knowledge into their business processes, and it is reflected in the development of ideas on how, when and where knowledge can be used to meet market needs.

#### **4. THE ROLE OF BALANCED SCORECARD LEARNING AND GROWTH PERSPECTIVE IN MANAGING KNOWLEDGE AND EMPLOYEES' CONTRIBUTION TO COMPANY STRATEGY**

*"We now accept the fact that learning is a lifelong process of keeping abreast of change. And the most pressing task is to teach people how to learn."*  
Peter Drucker

In the modern companies, the most of market value are intangible values (people, brands, processes etc.). Reducing the importance of tangible assets caused a reduction in the importance of financial measures of the companies' quality. Namely, the synthesized technical and financial indicators do not include investment of "intangible" assets, and have no role in direct allocation to profitable areas. This makes the need to development of systems measurements that will identify and evaluate other company's indicators such as customer relations, business process efficiency etc.

In response to the new challenge, there is new system that complements the conventional technical and financial reporting, adding to existing standards adequate measures of future performance. This system is called the balanced scorecard (BSC), and it is a broader concept of performance measuring, which highlights the non-financial performance in order to encourage proactive management style (Kaplan & Norton, 1996). Starting from the

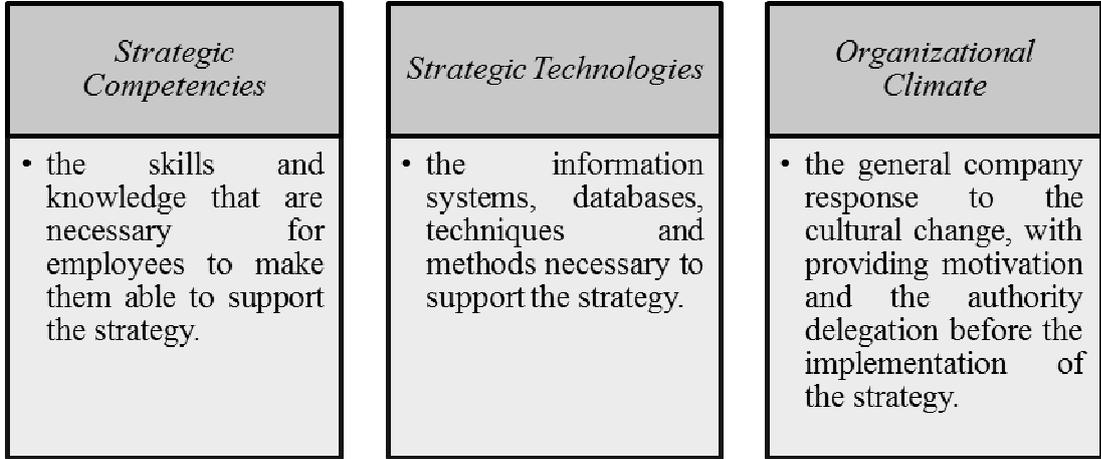
companies' vision, mission and strategy, balanced scorecard successfully measures company's performances. In the balanced scorecard, there is a transformation of intangible assets and intellectual capital in terms of giving a more realistic view of a company values. The measurement of these, previously immeasurable values, provides a complete picture of the values and significantly clarifies the direction of company's development in accordance with the strategy.

This system is extensively used in all business sectors worldwide as a way to synchronize the business activities on the one side and a vision and strategy on the other side. Balanced scorecard solves the problem of implementation strategy, providing an efficient and effective performance measurement system. On this way, there is a visible and measurable contribution of the company's elements to the whole company.

The three BSC perspectives - financial perspective, customer perspective and the perspective of business processes - clearly indicate a large gap between the abilities of people, processes and systems in one hand, and the actions required to meet the targets on the other hand. To overcome this problem, the companies began to invest in training staff, improving information and technology systems, harmonization of procedures etc. through the BSC learning and growth (fourth) perspective. Within this perspective, the company treats the areas of importance to the company's ability to enhance value by improving business processes and people. The mentioned perspective identifies the factors necessary for current and future company performances, creating such an infrastructure in which the company will be capable of generating long-term value. There are different interpretations of learning and growth perspective in the implementation of the BSC methodology; the ones are about simple considerations related to the number and structure of employment staff, taking into account the utilization of this resource; the other are about the analysis of information relating to innovation, intellectual capital and others significant indicators of business processes quality in the company.

As shown in Picture 3, the learning and growth perspective defines the core competencies and skills, technology and corporate culture necessary to support the strategy. In its original sense, learning and growth perspective defines three categories of "intangible assets", which are necessary for the implementation of company strategy.

**Picture 3:** The core competencies provided by the learning and growth perspective

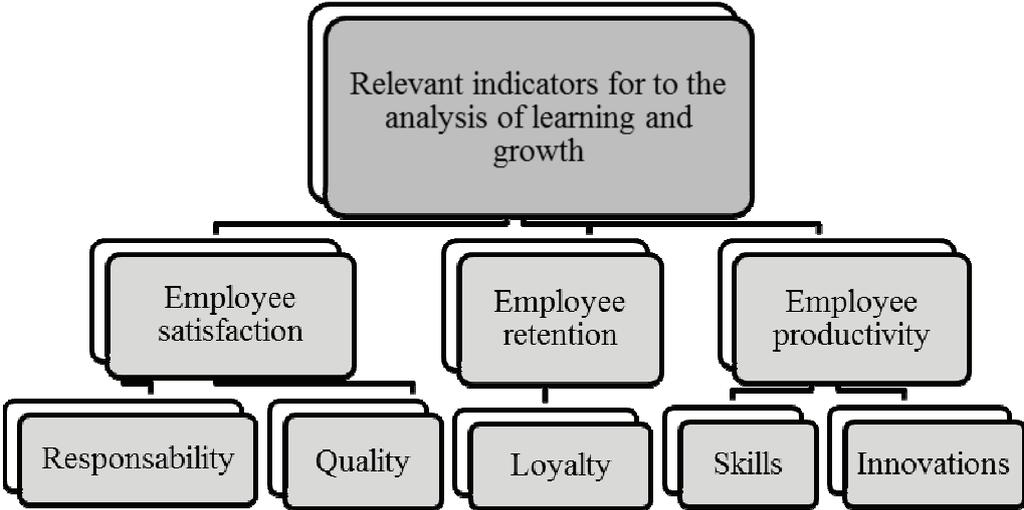


In the current business circumstances, the continual employees' education and training is becoming imperative. The investing in employees is not considered to be more cost but an investment. To keep up with the time and, very often, to predict certain situations and events, it is essential that employees continually improve and learn, and develop corporate culture and attitudes with respect to individual and corporate advances. In any case, learning and development are essential foundation for the success of any organization that is facing continuous improvement. Kaplan and Norton emphasize that "learning" is more than "training" as it involves facilitated communication between employees at all levels and sharing organizational knowledge.

The qualified employees, ideas, culture and concepts of knowledge have become the main elements that are important for the development, operation and improvement of overall companies' performance. The satisfied employees are able to increase its productivity, accountability, and quality and customer service. Thus one may say that, if the company wants to have satisfied customers, it must have satisfied employees who will serve them. Also, the company's goal is to keep employees satisfied as long as possible within the company. The loyal and satisfied employees care about the organizational values and improve business processes.

The employee productivity is a measure that affects the increase in skills and morale, innovation, improving internal processes and customer satisfaction. Through managing employees within this perspective, managers at the company realize what employees need to learn, improve and innovate to meet their goals. Thus, much of this perspective is related to the staff, which meets the other goals such as development of new products, continuous improvement, technological leadership and product diversification. This is illustrated on Picture 4.

**Picture 4:** The relevant indicators for to the analysis of learning and growth within BSC system



Source: Kaplan & Norton, 1996.

This set of indicators is sometimes difficult to express numerically. We are aware that in reality the company's ability to innovate or new knowledge is rather virtual than real concept. Innovation, learning and development can be measured only if it is clear which processes should be included and which not. In particular, some of the indicators could be the

proportion of employees who regularly use the Internet for business, the number of cooperation with business partners, the average time delays of development projects in progress etc.

## **5. THE BALANCED SCORECARD SYSTEM IMPLEMENTATION IN SERBIA – REALITY OR (STILL) RHETORIC?**

The Balanced Scorecard concept, as a system of performance measurement, was named as one of the biggest management innovations of the 20<sup>th</sup> century. In the US companies, where the concept was founded, it has become highly used methodology system, not only for implementing the strategy, but also as a powerful managerial tool for business development in the entire turbulent global environment. However, the situation is different when it comes to the markets of Southeast Europe, where foreign companies mainly apply BSC concept. A similar situation exists in companies in Serbia. It is often the case that many Serbian managers have never heard for this concept. Some of them heard, but do not understand it all or partially and many managers are not willing to accept, learn and implement something new. The most frequently cited reasons are lack of time and lack of money for implementing. Some researchers showed that in its implementation, it is very often that top management is aware of the importance of this perspective but they have a problem with defining appropriate objectives.

However, the current business trends force the domestic companies to stand shoulder to shoulder with global competitors and implement new systems of performance measurement. Some managers in Serbia have begun to adopt new systems and introduce them into their daily business, sincerely, in less range. There are some studies for local governments that include the Balanced Scorecard concept as well as some companies made the strategy of development for the following 5 years including the balanced scorecard (Bogicevic & Domanovic, 2009, p. 83).

According to one example of the company<sup>1</sup> that introduced the BSC system, we will show the important features related to the learning and growth perspective. In the Table 1 below, there is an illustration of key success factors and measures within the structure of BSC – learning and growth perspective. This example shows common factors, measures given in different units, measures description and target values per period, usually per one year (Medakovic, 2010, p. 81).

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<sup>1</sup> The company used in this example is situated in Serbia, and it sells computers and equipment, make design and implementation of information networks. Source: Medakovic, Dj. (2010). p. 81.

**Table 1:** The key success factors and measures within the structure of BSS – learning and growth perspective

Perspective	Key success factors	Measures	Unit of measure	Measures descriptions	Target value* / per year
Learning and growth perspective	Employee's motivation	staff training number	number	completed training sessions / employees	5
		education costs per employee	currency	education costs per employee	20.000
		absence from work	days	total number of days when staff is absent	30
		employee satisfaction	rating	employee satisfaction survey	10
	Investments in technologies	investments in innovations	currency	value of investments in innovation	2.000.000
	Information support quality	coverage of processes by IT	%	covered processes / overall processes	90.00
		availability of information system	%	number of working time / availability of information system	99.00

\*The target values used in this example are hypothetical numbers.

Source: Medakovic, 2010, p. 81.

Considering this table, we can see that the motivation of employees is certainly a key factor for company performance. The measures that are related to this are: the number of training for employees (internal and external), the cost of education per employee, the absence from work and the employee satisfaction (rating in the survey). A key success factor such as investing in new technologies is described by measure named: the value of investments in new technologies. The key success factor that is the basis for monitoring all other factors and measures is the quality of information support. Two basic measures which are monitored here are: the coverage of the processes by the information system and the availability of information system. There is a need for changes in way of observation the different segments of the Balanced Scorecard which will have significant impact on company performances' quality and thereby contribute to the business development.

In some cases, ones may get the impression that managers in Serbia have much more confidence in financial (traditional) performance measurement system based on accounting data than in non-financial performance indicators and performance measurement system. Truly, they do measure success from non-financial perspectives but in the other way than it is quoted in Balanced Scorecard concept. However, it need some time for managers in Serbia to realize the usefulness of the balanced scorecard and try out all its options in order to improve their business performances.

## 6. CONCLUSION

The globalization brought the enormous changes in business thinking and technologies that had impact on many worldwide organizations. The organizations who want to survive in unpredictable and complex competitive markets should quickly adapt to the new dynamics of business.

According to the fact that "intangible" resources are the decisive factors of business success, modern companies should recognize all business processes as processes of knowledge. The knowledge is considered as strategic company's resource, the source of competitive advantage and business success in the 21<sup>st</sup> century. The imperative for achieving efficiency is in transfer of relevant information for decision-making across all levels of company structure. It can be done with well-disposed knowledge management system, which is responsible for implementing and evaluating strategies of knowledge, aimed at improving of internal and external knowledge in the organization, and overall corporate performances.

It can be done with using the balanced scorecard, as a broader concept of performance measuring, which highlights the non-financial performance and synchronizes the business activities with the company's vision and strategy.

Within balanced scorecard system, the learning and growth perspective has the great significance for the knowledge management system. This perspective helps in increasing value for the company by improving business processes and people. The fact is that learning and growth perspective essentially means the quality of human resources in company. The prerequisite for the success of the company nowadays is that their employees are in a continuous learning mode. The modern company, in an era of knowledge economy, employees has the right store of knowledge and they are the major company's resource.

In practice, many companies meet the difficulties in BSC system implementation and application, especially in the markets of Southeast Europe. In Serbia, many managers do not understand or do not want to implement BSC system, justifying that by the lack of time and lack of money. The certain improvements are obvious, but it need more time to show how and in what way the domestic managers are applying modern, worldwide used systems.

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