

Importance of Knowledge Management in Modern Company Management

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Abstract The study deals with new approach in company management in field of knowledge management and with efficiency of human and intellectual capital. It point out the significant role of knowledge management in companies, principles of performance, its advantages, disadvantages and strategies. On one hand it analyzes implementation barriers to the model of k Knowledge Company. On the other hand it evaluates contributions and effects of knowledge management and knowledge workers. In the end of the study, trends and factors of importance of knowledge management as source of competitive advantage in knowledge based economy in EU, are discussed.

Keywords – Knowledge Management. Knowledge company. Human resources. Knowledge capital. Competitive advantage.

I. INTRODUCTION

Specific requirements of knowledge management, especially those based on the quality of information and knowledge, the speed of acquisition and market focus, necessitate specialized approaches to transfer of information and knowledge. Multiple attempts and social requirements naturally resulted in a formation of a new discipline referred to as knowledge management. The experiences of numerous successful companies indicate that complex and systematic approach to knowledge represents one of the main determinants of efficient company management. Knowledge management boasts many supporters, but also critics, who consider knowledge management to be nothing more than information management. The supporters of knowledge management argue that the force behind current development is not just based on information, but also the way new information produces applicable knowledge. Firms can build a competitive advantage on corporate knowledge as well as the most suitable guidelines and approaches used within the firm, but also on the knowledge representing the newest frontier in the firm's field. Knowledge is becoming the very basis of a growing firm.

II. IMPORTANCE OF KNOWLEDGE MANAGEMENT

The reason knowledge management is required is the fact that the value of the firm does not only dependent on its balance sheet but also on the intellectual capital – the combined knowledge pool of firm's employees. In fact, the intellectual capital can be the dominant source of value in some industries. The difference between intangible assets and intellectual capital is typically poorly defined. For example, the OECD definition states that intellectual capital represents

a part of intangible assets of the firm, i.e. s specific group of company's assets. Other authors conceptualize intangible assets as a goodwill and intellectual capital as part of goodwill. Some companies incorporated the concept, and provide not only financial balances, but also knowledge statements – the knowledge balances [1]. The contemporary firm should understand that the intellectual capital, i.e. knowledge, should be accumulated, protected, archived, supplemented, updated and, foremost, utilized. The basic idea behind knowledge management is to archive intangible knowledge that typically remains only within the minds of its employees and store it in an information system, or a system of knowledge management. If the firm succeeds, the benefits stemming from the use of knowledge management are considerable. A number of companies that offer the design of such systems of knowledge management offer the ability to calculate the expected return on such an investment. If the knowledge is available in the electronic format, it is much less likely important information will be lost. The successes and failures of previous projects will aid in development of new projects. The supervision and control over projects as well as the cooperation between project teams will gain a new level of efficiency. New employees can simply look up the required know-how strengthening the new connection between knowledge management and knowledge transfer. The tools required for an efficient knowledge system are an integrated information system, company intranet, data storage and functional organization-communication model. System integration of company information environment guarantees increased information and knowledge exchange transparency, and enables integration, consolidation and restructuring of knowledge necessary for each individual level of company management. The ultimate goal of knowledge management was well described by Y.G. Kim who said “the fundamental and final goal of knowledge management is the improvement of own functional organization and attainment of better performance.”[2]. Knowledge management contributes to the accomplishment of standard goals linked to company functions. According to this definition, the goals of knowledge management are consistent with the goals of any business entity:

- Increased productivity of the organization
- Increased profits
- Attainment of maximal market value of the company
- Maximization of company revenue
- Decreasing the total costs
- Implementation of new production methods
- Creation of new market opportunities etc.

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III. HUMAN RESOURCES AS BASIS OF KNOWLEDGE MANAGEMENT

In order to realize the project of implementation and utilization of knowledge management system, it is indispensable to obtain the human resources – knowledge workers – who are qualified to undertake such an intricate task. The experts can be found amidst a number of individuals, but increasingly within specialized organizations, since outsourcing is, in this case, less difficult to coordinate and it also decreases the size of initial investment. The sought after experts should be familiar with the projects of knowledge management automation. The management of company's knowledge can be efficient only if it stops being a glorified concept, and instead becomes part of the everyday work, habits, and company culture. Knowledge management should lead workers to exchange acquired information and knowledge. We should not forget that knowledge is carried in the employees' minds. Knowledge is a result of years of education, on-the-job experience and opportunities and an inalienable property of the employees themselves. In order to achieve a voluntary exchange of knowledge between employees, the company should allow the further professional development, improvement of its worker as well as attempt to convey the importance of the knowledge not only to employees themselves but also the company as a whole. This is only possible through an ongoing communication between employees. Firms, which work with proprietary information, are advised to abandon the concept of static teams and departments, and instead create a system of open, changing teams and a community with a less formal organization. In other words, prioritizing the stream of knowledge and people before the classic hierarchical model should lead to greater innovation and flexibility of an organization and to a change in employees' approach. In the end, men and women are the primary carriers of knowledge capital. We can only speak of knowledge capital if the knowledge becomes concentrated, organized, and purposefully integrated into the process of value formation. The knowledge capital is created by people with high intellectual ability, better knowledge, able to compete with the experts in the field. These are the people that guarantee the competitive advantage in the given field. Certain company tasks can be identified in relation to the knowledge workers. First, the company must acquire and keep knowledge workers. In order to preserve the effect stemming from an ongoing work with knowledge, it is necessary to work with the knowledge as a system [3]. This is only possible when the company ensures an ongoing increase in the education level of its workers. The top management must ensure that the company culture bolsters the search for new information so that the employees are capable of turning the acquired information into practice, and are willing to spread the existing knowledge to their surroundings in the interest of synergies.

IV. COMPANY IN KNOWLEDGE-BASED SOCIETY

In the last decades, the society has been shifting from the industrial towards the knowledge based and the company management did not remain unaffected. The most influential

were changes in the business environment as a result of globalization, ongoing market integration and the sharp increase in international competition in most industries. In this new environment, it was necessary to create a management model that satisfies the requirements of the knowledge based society. At the same time, new principles governing knowledge based business were needed. Information systems, based on the efficient use of information and communication technologies, became an integral part of successful modern management. In recent years, the importance of new technology grew as a result of increased management complexity and the need to provide quick and relevant information of high quality to the management on any level. As a result of the changes in the business environment, new approaches towards the company management are sought with an emphasis on the following elements:

- Emphasis is placed on the so-called human factor, specifically leadership ability and team work
- Company information systems and technology acquired a leading role
- The need to apply a knowledge-based management to the company became the staple of the new approach.

When trying to define the term “knowledge-based company”, one invariably encounters different opinions. One of the more general definitions states: “A knowledge company is a company based on knowledge, operating within the confines of knowledge-based society, and one that utilizes all positive development trends tested by time and already implemented by several companies of the world class.”[4] When trying to answer the question how does, or how a knowledge-based company should function in the global environment of a knowledge-based society, it is necessary to delineate the principles of management that would govern such a company. With the development of company management, three global concepts of management were created: functional, process-based, and, most recently, knowledge-based concept. The knowledge-based concept remains rooted in the previous concepts and as result it is compatible with both. Knowledge-based concept developed from the process-based concept, which, apart from the utilization of process-based philosophy of management, was expanded to incorporate management of knowledge, and given the conditions of the current environment it becomes a distinctly customer-oriented concept (through the so-called customer imperative). Based on the research of a number of scholars, Morton concept of management was created based on which the success of the company within a knowledge-based society depends on the dynamic nature of the relationships between individual company components [5]. This concept emphasizes the indispensable role of information system and technology as well as the role of the company culture. This approach fulfills the requirements for the company management within the knowledge-based society. Based on the research results, these are the six most important components of the company:

People – Strategy – Organization structure – information systems and technologies – company processes – company culture.

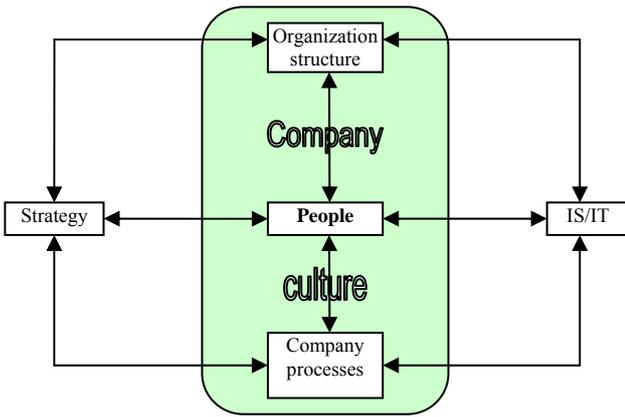


Fig.1. Model of knowledge-based company

Based on the Morton model, Fig. 1, and illustrates a potential model for the management of knowledge-based company. This model contains people - human resources in its center, as these are the carriers of knowledge. The requirement of wealth creation through permanent increase in productivity of knowledge and the care needed to maintain and knowledge worker place the people in the center on each level. While in the past this was only talked about, in the current knowledge-based company people is truly the most important element, which should reflect on the higher efficiency of company management. All remaining components are connected to the people component. Knowledge-based model of management requires the component of strategy, which remains of great importance in management in general. All other company activities relate to strategy, which ultimately defines the company's actions. The model of knowledge management must utilize not only financial characteristics, but also the relations to knowledge-based approach and to customers, which ultimately influence the strategy. Organizational structure on one hand and company processes on the other remain essentially connected to strategy. The resulting construct representing the company management cannot be complete without the integration of information systems and technologies (IS/IT). A definite requirement for the balance between soft and hard factors of prosperity is the company culture, which has a defining purpose in at least two ways: Towards the outside, the culture defines the behavior towards a customer, and towards the inside, it cultivates the company environment and satisfies the needs of the employees. The connection towards changing company environment and the requirement of flexibility and adaptability require yet another connection towards the relevant global surroundings. This connection must always express the need for quick and flexible changes, and the influence on all other components of knowledge-based model of company management.

After the evaluation of development trends and all positive and negative signals and requirements of knowledge-based company, the following six principles governing the functioning of the knowledge-based company were stated [6]:

- Strategy and productivity
- Customer imperative
- Process-oriented
- Knowledge management

- Team focus
- Firm identity.

The realization of individual principles governing the functioning of the knowledge-based company requires, based on the character of the principle, bigger or smaller role of efficient information systems and technology. For example, the principle of customer imperative encourages the company to use information systems and other systems to improve the relationship with customers through a Customer Relationship Management (CRM).

V. EFFICIENCY OF KNOWLEDGE WORKERS

The evaluation of knowledge worker efficiency as well as its continuous growth remains a debated subject in both theory and practice. The upcoming trend of decreased need for labor-intensive workers, who present obvious payroll costs that need to be curbed, contrasts the knowledge workers as capital, an asset, which needs to be developed through investment even in the midst of a global financial crisis. The productivity of labour (PL) can be measured by a direct approach based on the known relationship, Eq. (1):

$$PL = \frac{Q}{P} \quad (1)$$

Q - Quantity produced

P - The number of workers

Another natural result of knowledge management and its implementation into practice was a creation of a new management function – the chief knowledge officer (CKO), who manages and coordinates the functions related to company's knowledge pool. According to Drucker [7], the productivity of knowledge worker can be defined by six most important factors:

- the choice of the project goal
- autonomy and self-management
- continuous innovation source
- continuous self-education
- work quality
- new understanding of work by knowledge workers

It is necessary to view knowledge workers as assets, not only as extra costs. While the costs should manage and curbed in a planned fashion, assets should be cultivated and developed. This is the dramatic difference often misunderstood in practice. Knowledge workers must be considered as an indispensable capital asset. The complexity associated with the exact evaluation of financial worth and the economic return of knowledge and intellectual capital, however, remains a subject of further research and an ongoing debate of experts.

These complexities often relate to the barriers to implementation of knowledge management. If we consider the success of the knowledge management concept, we conclude that no firm possesses a natural comparative advantage, but any firm may gain one if the barriers to implementation of knowledge management are removed. A firm could provide training and education to its employees, create teams of

knowledge workers, ensure all employees have continuous access to information, support the continuous growth of information and in the end transform the firm culture into a knowledge-based one. However, costs are associated with the implementation of information system and technology, for which the firm must find resources if it wants to remain in the competitive market. It is also necessary to ensure an interaction between social, organizational and technological subsystems if the firm in order to effectively utilize information and communication technology for search, storage, manipulation and sharing of large amount of information and knowledge. Furthermore, interaction between used technological solutions and production processes is necessary. In the end, implementation of knowledge management to a concrete organization is not a simple process. A number of barriers prevent swift implementation. Perhaps the largest are the cultural barriers (individual and social), which need to be overcome via changes of the firm's culture.

VI. CONCLUSION

The goal of knowledge management is the optimal use of firm's intellectual capital and the knowledge of its employees in order to increase productivity, profits and fulfill business strategies. The strategic business plan and human potential of the firm become interconnected in context of knowledge management, and information and communication technology serve to cement the interaction and support steps towards the business goal. We can assume that knowledge management is useful in the business practice, since it was created for the needs of the business practice. Based on an analysis of the suitability of knowledge management and the models for management of a knowledge-based firm, it is necessary to focus on the following trends and factors in the area of knowledge management in the knowledge-based economy [8]:

- enrichment of business processes with knowledge
- development of knowledge management with the focus on customers
- formation of knowledge communities
- new approach to evaluation of knowledge and its efficiency
- development of knowledge management processes
- utilization of new, modern tools and methodologies for knowledge management
- creation of knowledge-based products
- Knowledge workers as a competitive advantage in knowledge-based economy.

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