

Knowledge Management in the Enhancement of Enterprise Strategic Capacity: Conceptual Aspects

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Abstract

In the economic development strategy of the developed nations, knowledge management occupies an essential place the importance of which is constantly growing that is determined by an impact of several factors:

- *the growing significance of global processes. Competitiveness in global markets has become the key component of the economic power in certain countries.*
- *success and sustainability of firms greatly depend on constant innovation. Innovation activity is of major importance for small and medium innovation business.*
- *economic development has entered the phase of constant technological transformations that in turn give rise to constant changes in the production base of industrial branches but also change the structural characteristics of the whole complex of socio-economic relations.*

The basic task of knowledge management is related to provision of users with fast and easy access to the needed knowledge in the course of particular tasks.

However, in the process of knowledge management a range of problems occur, e.g. low return of investments in knowledge management, complications related to the assessment of action related to knowledge work. The present situation has been greatly conditioned by a lack of interest on the part of scientists in fundamental theoretical aspects of knowledge management. Hence, until now there is no clear definition of the notions 'knowledge' and 'knowledge management' be shared by the majority of professionals. There is a split between theory and practice (business strategy and knowledge management). Knowledge management remains a complex discipline entailing simultaneously several aspects of organization management.

Keywords: *knowledge, knowledge management, knowledge management models, business strategy*

JEL classification:M15

Introduction

In our modern time of fast changes knowledge has become the main asset of the enterprise and it determines benefits and opportunities of its competitiveness. In such circumstances knowledge management and the necessity to integrate it as an important component of the enterprise performance has become especially topical. Knowledge management is orientated towards changes in the employees' behaviour in order to develop and expand the knowledge important for the enterprise as well as to improve cooperation among the employees and cooperation between customers and partners, and to contribute to the support of knowledge management process and strategic development of the enterprise.

Introduction of knowledge management is determined by various factors.

Firstly, technological opportunities of reception, transfer, storage and use of knowledge have sharply increased in escalating volumes.

Secondly, knowledge is becoming an economic category. The market where knowledge is on sale and bought distinctly stands apart, and operations with it bring profits and losses. Investments into knowledge for the purpose of any reception of innovations for gaining additional profit, and also for influencing behaviour of people expand. Recently it has become common practice for companies to ignore their non-material assets which can lead to serious negative consequences, namely – underestimation of possibilities of the organisation from investors and to accepting inappropriate performance strategy.

Thirdly, the increase in demand for knowledge, comprehension of its economic importance leads to changes of social and cultural character. The serious attention in new conditions is paid to issues concerning knowledge exchange, its transformation from unconscious images into clear categories ready for the analysis and distribution.

Comprehension of knowledge as economic resource, vital for the performance of the commercial companies, is a solid argument for inclusion it into sphere of management activity.

However, despite the fact that knowledge management has become one of the most implemented administrative tools in the companies worldwide, in many cases the level of efficiency of such implementation has turned out to be rather low. To a considerable degree it is a consequence of the fact that the main object of the research has been methodological and certain issues of knowledge management. Peculiarities of knowledge management at the level of organisation and specific methods which could help to implement administration of organizational knowledge have not been researched to the full.

The potential of implementing possibilities of knowledge management for the development of enterprises still remains rather disclosed. This can be accounted for the fact that practical approaches within the scope of knowledge management allowing implementing complex programs of knowledge management at the enterprise are not established to the full. Working out recommendations on improvement of knowledge management in companies in order to increase efficiency of their performance is topical.

The object of the research is knowledge management at the enterprise.

The aim of the article is to analyze theoretical models of knowledge management and opportunities of their practical implementation in the development of enterprises.

The objectives of the article are as follows:

- To specify theoretical ground and content of knowledge management
- To systematize the existing approaches, classifications, typology of knowledge management and distinguish specifics of knowledge management as an object of management;
- To carry out a comparative analysis of the approaches, models and methods that exist in practice of knowledge management;

- To determine stages of the process of creating the system of knowledge management and methods of its implementation.

Methodological base of the research is comprised of general scientific methods: induction and deduction methods, a method of the system analysis, a method of expert estimations, and a method of comparisons. In aggregate, these methods allow to consider the studied phenomena in progress, to reveal contradictions, to correlate intrinsic characteristics and forms of their display.

Strategic capacity of the organization

There are various approaches to determining the concept of the potential (capacity) of an organization. Traditionally the potential is determined as "volume of the production which might be produced at the complete use of available resources". The structure of the given potential includes the following: technical, technological, financial, labour, information, property potentials. At the same time it is possible to say that the potential is the degree of use of resources for satisfying needs in goods and services. The difference in definitions is explained by the fact that each of the researchers has distinguished just one of the potential features of the organization, without exposing it completely.

Multiple aspects of the concept "potential" are also accounted for a variety of objects which it is applied to. The main thing that unites different potentials is that practically all of them contain a certain set of possibilities or capabilities in that area where this or that definition is applied. It is necessary to note that in the majority of definitions it is emphasized that the whole combination of available possibilities is aimed at achievement of some definite purposes.

The focus of our attention is an organization and, hence, its potential. The concept "organization potential" includes sources, possibilities, funds, stocks that can be used by the organization for solving tasks and achieving aims in the certain area. It is rationale to consider the organizational potential taking into account the factor of control system.

If we define strategic potential of the organization as a set of funds, possibilities, resources for implementation of current activity and organization development, the information on the enterprise potential can be used further as the tool for increasing its competitiveness. We will consider the characteristic of components of strategic potential of the organization.

The financial potential is the possession of own, borrowed funds and possibilities of attracting the both in order to finance current activity and the events aimed at the development of the organization. The production potential is a set of possibilities of machines, equipment, buildings, constructions and technology for implementation of current activity and organization development.

The potential of the control system can be defined as a complex of possibilities provided by the organizational structure, mental potential and information support, for making adequate decisions conforming to external conditions in which the organization functions, and also to the accepted purposes and development strategy considering the corporate culture which has fully developed in the organization. Thus, it is possible to present strategic potential of the organization as the function the value of which depends on several variables.

$$C_{org} = \{F_1, F_2, \dots, F_n\},$$

Where C_{org} - strategic potential of the organization,

F_1, F_2, \dots, F_n - factors constituting the strategic potential of the organization.

Being aware of the resources which the organization possesses it is possible to calculate its strategic potential.

Since it is possible to reach the aim by implementing some alternative strategies, it is required to calculate the potential which the enterprise has to possess for implementing each strategy taking into account a priority of those or other kinds of resources. The calculation will be produced with the application of the weight coefficients reflecting the priority of a resource.

Further, comparing the potential necessary for implementing each strategy with the existing potential of the enterprise, the strategy choice by criterion of growth of the enterprise value where the sum of possible costs for strategy implementation is a restriction will be performed. At the same time, the potential of the control system depends on the kind of organizational management structure. The organizational management structure should also respond to changes in the stages of life cycle of the organization since it characterises the degree of adaptability of the control system. Thus, an effective performance of the enterprise implies constant growth of its potential. A leading indicator of the growth of the potential is the strategic potential since it provides not only adaptation of the enterprise to dynamically changing environment, but also the target function of the enterprise activities, i.e. maximization of its value. The success of the strategic development of the organization, successful realization of its strategic plans depend on a number of subjective and objective factors, for example, on readiness of the management to implement large-scale projects, on the knowledge, skills and qualification of managers or on availability of financial or other resources. It is possible to raise chances of the success by improving qualification of the management and/or by finding possibilities of the best access to resources, thereby increasing probability for achieving more large-scale and more attractive purposes on the basis of the increased strategic potential of the organization.

The strategic potential of the organization is conformity and sufficiency of resources and competences of the organization for the development and implementation of the strategy that would strengthen its competitive position. This definition is based on a resource view at the strategy which assumes that strategic development of a company is determined by availability and quality of disposable resources - material, human (skills and capabilities of the personnel) and non-material ones (a know-how, goodwill, etc.). Availability and quality of the resources and competences (i.e. capabilities, abilities to do something) stipulates to a considerable degree and individualizes a configuration of possible directions of the strategic development of the organization. Thereby the American management theorists J. Pearce and R. Robinson state the following: "the resource view at the strategy is based on the precondition that fundamental distinction between companies is that each of them possesses a unique set of resources and unique opportunities of their use." (Pearce., 2007.). For giving a more exact definition of the strategic potential of the organization it is reasonable to introduce the concepts of basic and unique resources and competences. The former serves for designating a minimum necessary set

of resources and competences for a company's existence in the competitive environment. Unique resources are a set of resources which provides organisations with competitive advantages and which it is impossible or too expensive for competitors to copy or gain. Unique resources are the major precondition and a reliable basis for competitive advantage, but they cannot be formed: they are either available, or are absent. The resources which can be acquired in the market (even those that are rare enough and expensive) are not unique. Therefore a simpler decision for gaining steady competitive advantage is the formation of the key competence. The key competence is an activity and processes, by means of which the organization uses resources for achieving the competitive advantage in such a manner that other organizations cannot manage to copy them. The founders of this concept, G.Hamel and K.Prahalad (Hamel.,1995), determine the key competence as "collective teaching of the organization, in particular, to be able to co-ordinate various production skills and to integrate numerous technological flows.

The strategic potential should possess invariance, i.e. a relative invariance, stability, repetition after each produced cycle. Stability of the key competence is also provided by a set of the interconnected processes which provide occurrence of valuable consumer properties in a product.

Concepts of unique resources and key competences give the company a convenient methodology within implementation of its strategy. With a competent management of the strategic potential, and with tracing the dynamics of its changes, the organization has possibilities to achieve long-term and short-term objectives, despite the aggressiveness of the environment just because the strategic potential and the resource approach imply constant monitoring of changes which occur outside and inside the organization and does not force the company's management to apply out-of-date management technologies.

Thus, all modern organizations can use strategic potential for constant growth and development, and also for overcoming the periods of stagnation and recession in cyclic development, leaving the periods of crisis with new perspective decisions.

Organizational knowledge as the strategic assets

Knowledge becomes the backbone factor causing both availability of elements and structure of the system management, and character of interrelations within the system. It determines the essence of managerial processes and gives the system new integrative properties. There arises necessity to consider knowledge as an administrative system with special characteristics. Knowledge as a category is defined as understanding, comprehension, acquaintance to something, acquired through research, supervision, and also a kind of the experience received with the lapse of time. It is interpretation of the information based on the personal experience, skills and capabilities of an individual. The concept of "knowledge" can be differently defined in various contexts. Thereby it is reasonable to address the definitions closest to management subject matter. According to P. Drukera's statement, "knowledge is the information having practical value, serving for reception of certain results" (Drucker.,2000.).

E. Bruking defines knowledge as "a set of the systematized information and understanding of the sense implied in this information" (Brooking.,1999.).

C. Frappaolo and W.Toms assert that knowledge is "the information being in consciousness of people and used for decision-making in a situation of uncertainty" (Frappaolo., 1997.). However, the most frequently quoted definition used by the researchers of the theory of knowledge management is that of T. Devenport and L. Prusak provided in their book "Working Knowledge" and which sounds as follows: "knowledge is a changeable combination of practical experience, individual values, contextual information and expert intuition, that creates a basis for estimating and consolidating new experience and new information (Davenport., 1998). The aforementioned definitions have some similar features, t.i. all of them define knowledge as certain advanced, evolving information.

In his turn, Sveiby, based on Polanyi and Wittgenstein's ideas, defines knowledge as an opportunity to cooperate (that can be unconscious, too). This assumption focuses on the activity: the ability to operate can be expressed solely in the course of performance. Each person refreshes his performance abilities and perception of the reality through his experience.

The employee's knowledge is one of the intellectual capital storages and the organization's non-material resources that allow the company to perform well. In such a context the organization's knowledge is connected just with the knowledge that is created and exists in the employees' minds. However, knowledge can be created from the data that are transformed into information by adding the context and are then transformed into knowledge through the experience. Cooperation among the employees provides knowledge transformation from an individual into the overall organization's knowledge. This transformation takes place when the humans share their knowledge with each other. The knowledge expressed once can be expanded by new information owing to the knowledge exchange between people involved in conversation and can become the primary source of knowledge stored in memory.

Knowledge as concerns the company is the information that is integrated in the general system and is easily accessible and used for the efficient performance of the company.

A.Bollinger and R.Smith have proved that the cumulative organizational knowledge embodied in wisdom, is distinct from knowledge of separate individuals and is the strategic assets.(Bollinger.,2001).

Knowledge conforms to all the conditions of the strategic assets:

- It is not imitated and is irreplaceable.

Each employee contributes to the organization development, based on personal interpretation of the available information. Group interpretation and acquiring (assimilation) of knowledge depends on a synergy of all participants in a group.

Organizational knowledge is constructed on a unique history of the organization's background and the accumulated experience of the researches. There are no two groups or organizations which would think or act identically.

Besides, the synergy of separate groups cannot be copied. Thus, group knowledge represents the certain competence which is irreplaceable.

- Organizational knowledge is the sum of knowledge and skills of workers: I "know-what", I "know-how", I "know-why".
- The valuable assets.

The organizational knowledge is expressed in improvement of products, processes, technologies and allows the organisation to remain

competitive and viable. Being the first to acquire new knowledge, the organization can gain a unique competitive advantage.

Thus, organizational knowledge is the strategic assets. It assumes that the organizations, wishing to remain competitive, should develop mechanisms of acquisition of necessary knowledge and spread of knowledge precisely, sequentially, timely, in the necessary form and to all those who need it in the organization.

Wiig has allocated some additional characteristics of knowledge which distinguish knowledge from other resources. Knowledge is poorly perceived and it is difficult to measure it; it is changeable and increases in the course of use. It simultaneously can be used in different processes and has overall influence on the organization. (Wiig.,1997).

Knowledge is not material, but it is measurable. Individual knowledge is a part of a particular person. Organizational knowledge is also non-material. It determines the organization and reflects organizational culture. Knowledge management is concentrated on the organizational knowledge I "know-how", I "know-what" through the processes of creation, classification, storage, distribution and application. It means identification and use of organizational knowledge through the experience and competence.

Wiig identified two purposes of knowledge management:

- To perform organizational actions as reasonable as possible in order to provide viability and success of the organization;
- To implement (apply) the best values of knowledge in a different way.

The authors of the article define organizational knowledge as the knowledge that:

- integrates obvious and implicit knowledge of each employee into the organization;
- is a specially developed set of principles, skills, rules and methods of development of the organization's behaviour in the conditions of changing environment;
- is formalized and stored by the methods, allowing to distribute it throughout the whole organization.

Aspects of management of organizational knowledge

The basic criteria of referring knowledge to organizational knowledge is considering its importance from the point of view of priorities of the company and possibility of its application for achievement of the purposes. The concept of organizational knowledge needs to be considered only in the context of its use. From the point of view of the company's management, the major kind of knowledge is organizational knowledge about identification of the activity and general strategy. From the point of view of the resource theory the company represents a set of material and non-material resources allocated between users by means of administrative and economic decisions. Organisational resources, including knowledge, are the basis of its organic growth. In the conditions of accelerated scientific and technical progress and high dynamics of the markets they represent strategic assets. Organizational knowledge becomes a strategic resource in those organizations which consciously and deliberately manage it.

Organisations are interested in knowledge management for several reasons. The key competences are based on skills and experience of the

people performing work, and can not exist in the physical form. Therefore it is important for the organization to reveal and expand bases of knowledge in order to keep and develop its key competences. The importance of tasks of management of organizational knowledge for business is determined by the level of administrative maturity of the company and competition level in those markets in which it is going to work. The place and value of the system of knowledge management as a resource are shown by classification of functions of the organization provided by D.Engelbart who was among the first to develop the system of "knowledge management".(Engelbart,1992).

A - primary activity, production of certain products or services;
B - secondary activity aimed at the improvement of the basic function;
C - the activity aimed at the enhancement of function B.

For the majority of the organizations only the activity of group A turns out to be critical. Genuine interest to management on the basis of corporate knowledge arises when functions of groups B and C become critical.

The authors share the opinion of modern researchers in the sphere of knowledge management and think that value of organizational knowledge is so great that it cannot be left without attention, it has to be managed. In business organizations the object of management first of all is the commercial knowledge representing "managed set of imperatives, samples, rules and prescriptions on certain aspects of work of the organization the use of which allows forming its market parametres. With reference to such knowledge the processes of creation, preserving and use for achievement of the purposes of the organization are provided.

Results and Discussion

The most important aspects of management of organizational knowledge, according to the authors, are as follows:

- choosing the strategy of management of organizational knowledge and its coordination with the basic principles of functioning and corporate strategy of the company;
- establishment of interrelation between corporate strategy of development and the key knowledge necessary for its implementation, including requirements of external interested parties;
- forming the efficient culture of knowledge - creation of the interest and the environment supporting an exchange of knowledge, generation and application of knowledge; support from the top management; stimulation and encouragement of cooperation and team work; intracorporate training (the purpose is to provide staff involvement in work of control system of organizational knowledge);
- structuring and actualization of organizational knowledge - identification of company' performance at the strategic, functional and process level (construction of a business model) promotes revealing and formalization of "strategic" and "procedural" knowledge - "what for", "why" and "how" organization activity is implemented; demand for knowledge for accomplishment of tasks at all levels is determined;
- revealing and availability of sources of knowledge - identification of key knowledge for strategy implementation, places of its use, creation and distribution; creation of classifiers "knowledge tree" and "bearers of key knowledge" in a business model, projections of "knowledge tree" on corporate information basis and employees;

- connecting organizational knowledge with the company processes - introduction of functions and development processes of management of organizational knowledge and management of the business model of the company on its basis, forming corporate regulations - setting regular activity in this area;
- level of technological supply- storage of the data and knowledge; systems of documents' control, a Web-content, archives, access rights; means of group work; platforms and corporate information portals;
- creation of an informative technological platform for solving tasks of knowledge management: formation and use of corporate memory, a portal of knowledge as a part of the corporate information portal, analytical data processing, management of documents and non-structured data of the company; automation of business processes; organisation of teamwork (network services intranet, network conferences and forums, on-line meetings); decision-making support (work of discussion groups, consulting and expertise).

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For implementation of the control system of knowledge it is necessary to reconsider the traditional organization. The traditional organization is not capable of providing efficient management of the increased volume of information and more difficult knowledge. A new, "trained" type of the organization should be arranged in order to motivate the company's personnel to develop organizational knowledge and to put it into practice. In such organization there is constant training at all organizational levels that, in turn, creates a competitive advantage of fast training of the company and well-timed reaction to external changes. Creation of the trained organization is a necessary condition for the efficient knowledge management at the enterprise since a similar type of the organization is called for stimulation of creativity and an exchange of knowledge among employees.

The structure of the trained organisation should contribute to a better information exchange among employees and to creation of innovations. The given requirements are most completely satisfied by a horizontal structure (with the minimum quantity of hierarchical levels) with use of temporary working groups (mobile matrix structure).

Conclusions

Performance of the modern enterprise is aimed at the increase of competitiveness. Only those companies that use all available resources to the full will be able to perform efficiently. Employees' knowledge is becoming the main competitive resource in the economic environment. It provides rapid and adequate reaction to the company's internal changes and those of the environment.

All the business processes at the enterprise are implemented and monitored by the humans, and the quality of the human activity creates the basis of the successful performance of the company. Business efficiency is made up of wishes, competence and knowledge of the personnel in the individual and team work. The task of the knowledge management is to harmonize the potential of an individual and production requirements. It should be taken into consideration that within the scope of interest of knowledge management there are not just employees of the company, the company's memory includes knowledge of consumers, too. Therefore, conforming to the needs of those who are concerned should be noted as the aim of knowledge management.

The basis of knowledge management is the process of knowledge creation the target of which is to determine what kind of knowledge is necessary for the organization, what sources it is acquired from, how much it would cost, who and when would work with it. Knowledge management cannot be implemented by the organization alone since it concerns the scale of the employees' values, customs and actions, too. It is important for the employees to change their perception and actions in acquiring new knowledge and experience and in their further application.

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This work has been supported by the European Social Fund within the Project
«Support for the implementation of doctoral studies at Daugavpils University»
 Agreement Nr. 2009/0140/1DP/1.1.2.1.2/09/IPIA/VIAA/015