KNOWLEDGE MANAGEMENT: COLLABORATIVE KNOWLEDGE MANAGEMENT ASPECT

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Abstract: Environmental changes, increased economic and social knowledge role lead to theoretical and practical changes of knowledge management. Becomes relevant not only to capture and store knowledge within the organization, but also to increase the value of knowledge. It is very important to share them internally and externally in the organization, in order to create the best business practice. Knowledge dissemination is one of the most complex knowledge management tasks. Often, in practice common problem is that knowledge is not available to the right people or not accessible when they need it. Knowledge acquisition and accumulation is assigned to two different dimensions in the organization: it is individual, but also social-functioning and acquiring meaning only in the social context. This leads to the trend that cooperating knowledge management concept more often occurs in knowledge management, which content focuses on socialization processes and interpersonal interactions. These processes help to create common organization knowledge base, to successful assimilate existing knowledge within the organization and externally, ensuring new knowledge creation process. The paper presents methods by which most commonly implemented, knowledge development and distribution processes and new opportunities for knowledge development are created: communities of practice, social networks of practice and organizational learning, which are focused on supporting and fostering communities to ensure effective knowledge creating and sharing. It is emphasized that the implementation of cooperating knowledge management objectives needs to pay attention to potential practice communities and network identification, develop for their activities, and socialization processes, suitable environment and infrastructure, coordinate, but not formally manage, activities of those groups.

Keywords: knowledge management, collaborative knowledge management, knowledge dissemination, knowledge sharing, communities of practice, social networks.

Introduction

Environmental changes and the increased economic and social knowledge role lead to theoretical and practical changes of knowledge management. The importance of an ability to evaluate and manage information flows and to have knowledge and experience in order to make discerning and strategic decisions timely is determined by the speed and frequency of changes. In the context of changes, a lot of importance is given to knowledge, thinking and understanding (Zakarevičius et al, 2004: 393). The authors distinguish two main environments: reality and future. In reality, knowledge about the already happened events is accumulated and managed, the accumulated knowledge is transformed into a perception of a situation, it is attempted to consider why one or another thing or event appeared and how it could influence an employee's environment and a business in general. The future environment means that the essence of changes and their causality is understood. If knowledge is attributed to a basic organisational source, the
accumulation and management of individual and collective organisational experience becomes a tool for competition between organisations when seeking for success: “If individuals have to specialise in order to acquire knowledge and the production of processes and services requires miscellaneous knowledge, the production shall be organised in the way that various knowledge would be accumulated and thus the specialisation of individuals would be saved” (Tidd, 2006: 41, quoted by Grant, 1997). An organisation is an institution that determines mechanisms which help to accumulate individual knowledge, that later transforms into products and services, and skills from different people. By means of a dialogue, interchange process of knowledge, discussion, sharing of experience and observing, individual knowledge enhances both: the knowledge of an individual, a group or an organisation and the inter-organisational knowledge. Because of the ability to transform data and information into knowledge and to use them in order to have the advantage for a company, every employee of the organisation becomes a participant of the knowledge management environment of that organisation.

The main conceptual position of the article is that today it is important not only to record and accumulate available knowledge inside an organisation, but to increase the value of the knowledge, as well; it is essential to emphasize the processes of knowledge development and sharing inside and outside the organisation in order to make the best working practices.

The aim of the article is to make a theoretical model of collaborative knowledge management that would illustrate the importance of knowledge development and sharing processes and its importance in the scope of general knowledge management activities system.

The main problematic topics analysed in the article are the following: knowledge management: an aspect of the traditional viewpoint evaluation; interactions of the collaborative knowledge management; designing of the collaborative knowledge management model.

Methods of a scientific research: the article is based on the systemic analysis of scientific literature, logical analysis and the methods of abstraction, analogy and generalization.

Knowledge management: an aspect of the traditional viewpoint evaluation

In order to evaluate the tendencies of the traditional knowledge management change and its causes, it is important to consider the main aspects of the traditional knowledge management and their characteristics in the context of environment transformations. Knowledge management is generally understood as a means of having better control over the production and usage of explicit and implicit knowledge in organizations of any kind, preferably commercial businesses, but also public administrations. To put the objectives of traditional knowledge management in a nutshell: to know what an organization in principle knows and to make that knowledge available to the right people at the right time (Kuhlen,2003).
The main product of knowledge management is the changing environment that encourages employees' creativity, sharing, storing and application of their knowledge and that contains all processes, roles, means and structures that allow doing that (Polley and Smith, 2007). Therefore, a modern organisation has to consistently develop and keep the main competences of employees, create new ideas, perform researches and experiments, cooperate with science institutions, encourage employees to achieve knowledge and learn, adapt to the environment, social tendencies and react when creating innovative, creative products and services for the market. The ability of organisations to use the talents that are in their disposition in the way that the new products, processes and services were created is very different, therefore, creative and innovative ideas are considered to be more and more valuable as the main factors that help to survive in the competitive environment. The best environment for creativity is knowledge organisation with an efficient expression of knowledge management that encourages to look for new ideas, ways to work and means, to share both: good and bad experience, to learn continuously, to improve the available competences and to acquire new ones. It is obvious that learning from success and failures, sharing of knowledge with others and reasonably applied learnt lessons allow to achieve better working result.

From the traditional viewpoint, knowledge management is usually treated as a unity of processes that allow to identify, acquire, keep, record and render the knowledge to those people who need it (1 Scheme).

Scheme 1. Knowledge management processes (Probst et al. 2006, p. 40)

That is a complex attitude towards the business administration and development when applying theoretic and practical knowledge in processes and thus ensuring the advantage of an organisation over other organisations. Defining the building blocks of knowledge management in this way has several advantages: it structures the knowledge management process in logical phases; it suggests effective points
for interventions, it provides a tested framework for diagnosing the sources of knowledge problems (Probst, 2006).

Modern organisations realise the importance of knowledge processes, however, the emphasis of a continuous and gradual implementation has taken a different turn: the processes of knowledge development, sharing and rendering inside and outside an organisation are raised over knowledge identification and storage. The communicative paradigm of knowledge management is also increasingly relevant as a means of organizing learning processes as collaborative cooperative, knowledge sharing processes. The dynamic or communicative view on knowledge management does not take knowledge and information as fixed, but emphasizes the ongoing growth and renewal of knowledge and information in a continual process of exchange and communication. (Kuhlen, 2003). The tendency is conditioned by the changes of business environment and limitations of the traditional attitude towards knowledge management: the organisation of knowledge management is isolated (Hansen, 2001); it is oriented towards practice instead of processes (Brown, Duguid, 2001); there is a knowing – doing gap (Pfeffer, Sutton, 2001); potential practice communities are ignored inside an organisation (Wenger; Snyder, 2001). Modern organisations need to build a new culture that promotes knowledge sharing and constant learning. This is essential in order for corporate knowledge to be effectively retained and enhanced (Bounds, 2009). The increase in competition makes organisations to continuously monitor the tendencies of the environment where they work. However, the globalization level is also increasing, therefore, the development process requires more than the monitoring of the environment. In order to maintain similar competitive level and creativity of the additional competitive value, it is necessary to penetrate into the market, to learn, generate new ideas and transfer new processes, structures and products as quickly as possible. The main aspect of continuous improvement is the change of an attitude from “individual” towards “group” (Cushman et al, 2002). The business based on knowledge management has to integrate and be in cooperation with the knowledge of specialists and scientists when performing researches, forming groups of specialists and creating innovative products, therefore, it is important for organisations to do both: to accumulate knowledge and ensure an effective sharing process of that knowledge, otherwise, the knowledge loses its value or remains unused. The obvious changes in business market make organisations to review the fields of knowledge management and to develop only those that are the most profitable for organisations.

The appearance of practice based on the “collaborative knowledge management” concept and its content, in principle, is not a new tendency of knowledge management; it is, rather, a continuation of knowledge management that, in regard to environmental change, puts special emphasis on a modern content of knowledge management, the essence of its application and benefit to organisations. Knowledge is created by people, therefore it cannot be analysed only by means of the fixed forms of the results (reports,
documents, data bases and etc.). It is necessary to take into account the social aspects: the majority of information is accepted by people, they perceive it on a hunch and through individual interactions, therefore, in the field of knowledge management it is very important to analyse social and individual collaboration processes. In order to manage knowledge not only in its accumulation stage, but to create its additional value by means of activities of the organisation, it is necessary to ensure its development and rendering aspects which realisation is possible only by means of collaborative knowledge management interactions. It is admitted that the base for knowledge management is the interaction of people, i.e. the establishment of relationships between individuals and knowledge artefacts that are created by people (reports, receipts, data bases, documents, web pages and etc. (Stewart, 2001).

It may be stated that currently attention is mostly paid to the establishment of the collaborative relations, and their maintenance between employees of an organisation because it allows to ensure knowledge circulation in the organisation.

**Interactions of the collaborative knowledge management**

Knowledge development and sharing is one of the most important and complicated processes and tasks of knowledge management. The essence of the collaborative knowledge management is the interaction of the processes that allow both: formation of new knowledge and skills that are the base for creation of new products and more efficient processes and ensuring the ability of all organisations to use the isolated information or experience. Often, in practice common problem is that knowledge is not available to the right people or not accessible when they need it. Knowledge acquisition and accumulation is assigned to two different dimensions in the organization: it is individual, but also social-functioning and acquiring meaning only in the social context. The content of collaborative knowledge management focuses on socialization processes and interpersonal interactions (Spence, 2009). These processes help to create common organization knowledge base, in order to successfully assimilate existing knowledge within the organization and externally, ensuring the new knowledge creation and application process. The main psychological - social processes typical of a direct knowledge rendering are the following: imitation, identification and learning-by-doing. The mentioned processes can only be implemented during collaboration because all our knowledge is in the tacit knowledge dimension and people are able to completely perceive the knowledge only by means of personal interactions: they have to see, listen, communicate and observe others (Sveiby, 1997). A lot of knowledge is perceived indirectly while evaluating additional aspects and signals – gestures, mimics, body language – and doing this through the personal experience. It proves that the collaboration with others may have critical importance in how the knowledge, tacit and explicit, is perceived and developed. Both types of knowledge important and take part
in socialisation processes. It is rendered through the interaction of explicit and tacit knowledge by the method of knowledge conversion by Nonaka and Takeuchi SECI model: Socialisation (conversion of tacit to tacit) - to share knowledge by direct social interactions; Combination (conversion of explicit to explicit) - to combine knowledge in order to obtain new knowledge forms; Externalisation (conversion of tacit to explicit) - to share and spread knowledge in organization; and Internalisation (conversion of explicit to tacit) - to learn by practice (Nonaka, Takeuchi.1995). In the model, the basis of knowledge creation in organizations is continuous interaction (transfer) among individuals, and continuous conversion from tacit into explicit knowledge (and vice-versa) by individuals, supported by the group (Nonaka, 1994). According Sven, J, Henrik L. (2003) Nonaka and Takeuchi describe the conditions which allow the creation of organizational knowledge-intention: expressed by the organization will to fulfill its purposes (formulating strategies in business context; autonomy: the situation when individuals are acting autonomous, according to some minimum specifications, being implied in teams with self organizing capabilities; fluctuations and creative chaos: specific condition which stimulates the interaction between the organization and the extern environment; redundancy: the existence of information which exceeds the operational requests of organizational members; variety: internal diversity which offers to every employee rapid access to a variety of information.

Usually the newly created concept has to be related to the existing explicit knowledge in order to make it into something real. Therefore, the method starts by relating different parts with the knowledge expresses by words. The explicit knowledge may be shared during learning processes, seminars, documents and etc.; internalisation is when ideas acquire a particular body and become a valuable source of organisation.

Prahalad and Hamel (1990) emphasized the importance of continuous and uninterrupted learning by introducing the concept of performance and stating that it is not hard to repeat performance and usually it reflects the aspect of interrupted learning when it is under the process of learning and seeking for knowledge that is necessary in order to ensure the performance; and the base of continuous and uninterrupted teaching is the analysis and evaluation of the environment, defects and dangers of an organisation when the new competences that allow the organisation to be distinguished between other organisations and that may be hardly repeated by competitors are achieved.

In order to implement the processes of knowledge development and rendering in an organisation, the following factors are of critical importance: knowledge rendering is a part of the cognitive human behaviour context; an asymmetric distribution of knowledge in an organisation; knowledge sharing process is a spontaneous process; knowledge rendering depends on liabilities of a direct sender and receiver of knowledge (Michailova, Gupta, 2005). Usually, knowledge development and distribution processes and
new opportunities for knowledge development are created: Communities of Practice, Social Networks of Practice and organizational learning which are focused on supporting and fostering communities to ensure effective creating and sharing of knowledge.

**Designing of the collaborative knowledge management model**

During the implementation of collaborative knowledge management objectives, the attention shall be paid to potential practice communities and network identification, the development of their activities and socialization processes, suitable environment and infrastructure, and the coordination but not a formal management of activities of those groups (Wenger, Snyder, 2001). The activities of practice communities and networks are based on the following two processes: participation and cultivation. The processes allow to reveal the fact that the collaboration between individuals is the most important aspect in order to implement the collaborative knowledge management (Bettoni et al, 2006).

When modelling the activities of knowledge management, it is admitted that it is hard to control individual knowledge and competences and an organisation has to combine its strategies, political trends, actions and aims. Only then it will be able to create appropriate structures and environments that are favourable to collaboration and to encourage the relationship necessary for knowledge development in order to achieve the aims of the company. Activities of knowledge management in the contexts of internal and external environment of the organisation and attempting to create the base for the organisation's knowledge, it is important to evaluate the following aspects: the significance of knowledge development and establishing of an organisation's vision; learning; the practical application of knowledge and etc. (Lustri et al, 2007).

Interaction of collaborative knowledge management could be presented by the constructed model, which covers five levels (1 Figure).
The first and second levels illustrate the organizational knowledge creation by individual and team interaction, learning, knowledge conversion (SECI model) and knowledge management processes. Knowledge creation is not a systematic process that can be tightly planned and controlled. Backgrounds of collaborative knowledge management are dissemination and sharing knowledge management processes.

The third level illustrate that knowledge management is a complex of activities and their systematic development inside the organization, which requires strategic planning. Planning should clarify the knowledge goals, knowledge management strategy and create an open organizational culture, which encourages knowledge sharing, tolerance, collaboration and trust (Goh, 2002).

The fourth level illustrate that the newest knowledge which would be expressed by means of products, services and processes of the organisation and become a noticeable sphere of knowledge management activities.

The fifth level illustrate the external organizational environment as an important part of collaborative knowledge management, because potential partners of the organization need to dispose a variety of different relationships to other companies and organizations. It leads to a concept we would like to call “enterprise
without boundaries”, which is defined as “...a co-operation of legal and economically independent enterprises, which try to achieve competitive advantages together” (Blecker, Neumann, 2000).

The established theoretical model of the collaborative knowledge management illustrates the processes of knowledge development and distribution and its context in a common scope of knowledge management activities and processes: to scan the environment, to evaluate the culture of an organisation and its intention to share knowledge and experience, to establish the aims based on management, to identify and evaluate the available knowledge, to continuously learn, to generate, render and create the nets of organisational and inter-organisational competences based on the newest knowledge which would be expressed by means of products, services and processes of the organisation and would become a noticeable sphere of knowledge management activities.

Conclusions

The tendencies of knowledge management change are determined by economic changes of business environment and limitations of the traditional attitude towards knowledge management.

Collaborative knowledge management is a consistent and logical continuation of knowledge management conditioned by environmental changes; it ensures the identification of potential practice communities and networks and the establishment and coordination of infrastructure of the appropriate environment that is favourable to socialization processes.

Collaborative knowledge management, as the most important knowledge development and distribution means, is expressed through socialization processes and identified through the expression of practice communities and social practice networks.

Collaborative knowledge management can’t be considered separately from the organizational learning process. Knowledge development and dissemination processes, employees socialization initiatives to ensure that individual human knowledge is enabled to operate in the context of employees collaboration and can create a general knowledge of the organization.

The established theoretical model of the collaborative knowledge management illustrates the processes of knowledge development and distribution and its context in a common scope of knowledge management activities system.

References


