Knowledge Management Embedment in Company, Knowledge Repositories, Knowledge Management Significance and Usage in Company

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Abstract

Enterprises (regardless of size, hence small and medium sized including), in order to flourish and stay competitive in the future, have to face and properly address current challenges of market economy. To address them properly, means to adapt and adjust to changeable market conditions, e. g. they can not use 20th century business management in conditions of 21st century. One of essential changes in market economy is the new system of creation of welfare and wealth of both enterprises and countries, that is the knowledge economy. This development means global move from industrial to knowledge society, to the knowledge economy. Our study focuses just on knowledge management, knowledge management and its implementation in enterprise. We describe fundamental steps of implementation and focus on technological background of knowledge management. We have chosen knowledge bases, their uses in a specific company, with a possibility of extension and methods of utilization in enterprises.

1. Introduction

1.1 Why do we deal with knowledge management in a company?

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Intellectual capital and its effective use is one of the key conditions of business competitiveness in 21st century. Sufficient knowledge utilisation is a challenge for companies since by using their employees´ knowledge these companies can adapt to more and more, as well as faster and faster changing conditions and stronger competition on the global market.

Knowledge processes are an inseparable part of knowledge management and it is the knowledge processes and their identification and implementation in companies that we focus on in our article as well.

In the first part of our article, we focus on knowledge management embedment and implementation in a company.

1.2 Knowledge management, a project of knowledge management implementation in a company

The objective of knowledge management application is to create a system which facilitates business knowledge creation, collection, transfer, and application in an effective way. However, there is not one universal solution how to implement knowledge management that would be applicable for every company, or every type of company. First of all, it is necessary to find out which knowledge processes the company needs, wants to develop since they are not adequately assured. Then comes the next step in which we discuss the most suitable technology for a particular company.

1.2.1 Further development of company´s ability in the knowledge management area requires effort which needs to be focused primarily on these areas:

- involvement and activity between all the concerned parties
- creation of awareness of knowledge management, its significance, its utility for a company
- application of activities related to knowledge management on the basis of a holistic approach
- knowledge management integration into the business processes of a company
- work team has to be able to perform work for the knowledge management even without the help of the central management team. (Collison, et al, 2006; Litvaj, et al, 2013)

As far as knowledge management is concerned, knowledge announcement, delivery, transfer, combination and creation are the decisive activities, however, it is not dependent solely on the existence of information technologies. Many companies misunderstand knowledge management, they have not understood its role and significance for their company. They implement knowledge management solely through some suitable information technologies and then they quit. Every company that wants to implement knowledge management has to have adequate motivation for this implementation and full support of the top management, or they will never succeed in functional implementation of knowledge management in their company.

Knowledge is acquired and memorised facts and relationships between them, it is information which within itself includes values, attitudes and ideals; knowledge and skills that have an influence on human behaviour and are subject to changes. Thus a company, based on the definition above, is ´a learning organisation´. That´s why many theorists consider the terms ´knowledge focus´ and ´knowledge creation´ more appropriate than ´knowledge management´, since they express activity, rather than an object. The term ´education management´ is also appropriate since it involves knowledge creation, knowledge sharing and knowledge utilisation through knowledge and information. (Antosova, 2010; Mrazova, et al, 2011; Czan, et al, 2013)

The basic system architecture to support the knowledge management system (KMS) for a company:
1. Knowledge flow support (process point of view). Basic knowledge processes, learning processes in a company – particular types, their basic properties and differences between them, relationships between knowledge processes and learning processes.
2. Knowledge repositories – introduction. Knowledge repository requirements (organisational memory). Knowledge repository types (knowledge attic, knowledge sponge, knowledge publisher, knowledge pump) and examples of real KMS of the given type.
3. Knowledge cartography. Internal organisation of a knowledge repository, search types.

4.   Communities of knowledge workers. An example of a real system.

1.2.2 General KMS architecture

Knowledge management is in fact the management of the environment which is to facilitate knowledge circulation through the 4 phases of the knowledge life cycle (See the SECI model). Since IT infrastructure makes up a considerable part of the company environment in the current information society, there is the question of how information and communication technologies can contribute towards the knowledge circulation.
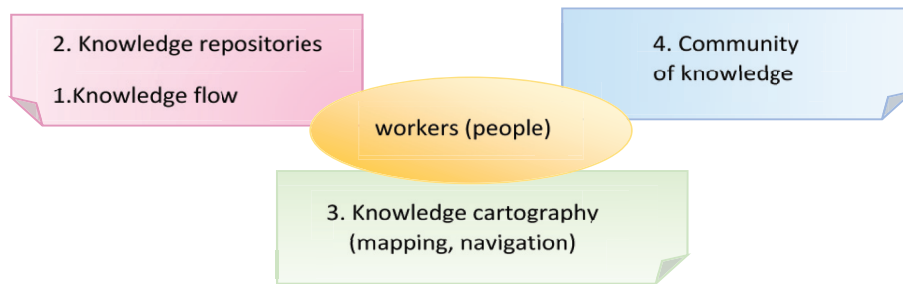

Fig. 1. General KMS architecture (Antosova, 2010).

In the second part of our article we focus on the technological support of the knowledge management in a company, particularly on knowledge repository utilisation in a company.

1.2.3 Effect of company management strategy to application of knowledge

The company management strategy could be:

- Low-cost (focused to application of existing knowledge instead of development of new knowledge).
- Differential or specialized respectively (seeking new opportunities, frequent product innovations - obtaining of knowledge).

Application of knowledge by guiding and routines, suitable for companies with low-cost strategy. Obtaining of knowledge by combination and socialization is more suitable for companies with differential strategy.

1.2.4 Environment characteristics

The environment is characterized by certainty rate, i.e. the extent of stability of conditions in the business sector of a particular company. In the environment with low rate of uncertainty, the processes of knowledge retaining and sharing are suitable as retained knowledge will be relevant during the extended period.
To the contrary, in the uncertain environment, more suitable are:

- Knowledge obtaining processes (contributing to the ability of company to come with innovative solutions of emerging problems).
- Knowledge application (enabling individuals to solve problems upon solutions recommended by those with sufficient knowledge instead of knowledge sharing process, which is time-demanding).

1.2.5 Priority determination process between identified knowledge processes

• To gradually set the relative suitability for all types of knowledge processes and all conditional characteristics as follows:

– 1.0 if suitable
– 0.0 if not suitable
– 0.5 if suitable for both alternative values

• To sum up all assigned values for each type of knowledge process separately.
• To compare cumulative values and assort knowledge processes according to them.

When evaluating the table, it is necessary to calculate all assigned values for each type of knowledge process separately. Such values are obtained by analysis of knowledge processes in a specific company. Finally, for evaluation of this process, it is necessary to compare cumulative values and sort knowledge processes according to such cumulative values. (Dzbor, et al, 2000; Cubonova, et al. 2011; Sadilek et al, 2014; Michalik, et al, 2013)

Table 1. Priority setting between identified processes (Dzbor, et al, 2000)

Knowledge Management Processes	Company Tasks Uncertainty	Dependent Tasks of Company	Company Tacit Knowledge	Company Procedural Knowledge	Low-cost Company	Company High Uncertainty	Total
Combination							
Socialization obtaining	-						
Socialization sharing	-						
Distribution							
Externalization							
Internalization							
Management							
Routines							

1.3 Knowledge repositories and their utilisation in a company

The effective implementation of the intellectual capital in a company or another organisation is a key factor and the aim of knowledge management. Economically and commercially successful companies are changing nowadays, they intend to shift their focus and put their emphasis on knowledge, and use knowledge especially for innovations in the company. Knowledge management is gradually becoming an inevitable part of the company management in more and more companies.

Knowledge management is the cause of the change of processes and information systems in a company, therefore it is necessary to solve problems, such as: knowledge management integration into the integrated company information system, the interconnection of the knowledge company system to the information company systems, the technological support of knowledge management, employees´ activity, the integration of these technologies into company information systems, human resources of the knowledge management, and so on.

Knowledge repositories and knowledge libraries are among the tools of the effective and efficient implementation of the knowledge management system in a company.

It is the knowledge repositories and libraries that we focus on in our next article.

1.3.1 Knowledge repositories and libraries

Knowledge repositories and libraries provide an effective organisation, an intelligent access and repeated utilisation of the accumulated explicit knowledge stored in different documents (either in paper or electronic forms). It depends on what kind of company it is. As for knowledge repository (or storage) processing, first of all we need to know in what form the knowledge is, and what is even better, in what form the company´s knowledge should be recorded.

As for a small company, it could be a few printed documents. In such a case it is necessary to create a place to which the employees who need the documents have easy access. Nowadays it is more common that these documents are in the electronic form, and thus there are several options how to manage such documents. In most cases they are stored somewhere in managers´ computers (and are shared ad hoc through emails, etc.) or in servers. If the company has a built-up computer network, then it is necessary to create a place in which the necessary knowledge can be accessed by all the users. The company´s intranet is a very good, cheap and safe option. Most companies have their own website and it is common for the staff to be connected to the internet. Then you can simply use the password protected part of the website as a simple intranet in order to create the document storage. Where working with the internet is more common, the intranet setting becomes a lot more sophisticated not only from the security point of view but also from the content point of view (besides the content storage, it could be discussions systems, blog systems, e-learning systems or wiki systems and other more advanced technologies). Besides text documents, it could be various multimedia and interactive ways of knowledge sharing.

What has to be underlined is the fact that knowledge sharing has to be supported by the company culture, which supports learning, cooperation and knowledge sharing. As for small companies knowledge sharing through a personal contact (during the working process, meetings or trainings) is a lot more common. The issue of culture has been mentioned due to the fact that knowledge repositories (if they exist at all) mostly serve as a passive storage, where the content comes somewhere from above or outside. As for the creation of the knowledge content, it is a lot better to involve also those who we find commonly to be the knowledge ´consumers´. Most useful knowledge comes from the inside of the company and the only problem is to make this knowledge recorded. Therefore it is advisable to give the employees the chance to have access to the necessary knowledge, but at the same time to give them the chance to contribute comfortably with their own knowledge.

2. Conclusion

If the company intends to be competitive in the long term, the turbulent changes in the global economy demand changes in the management as well. The company management has to accept this fact. As everything around us is changing, so are the objectives, principles, methods and tools of company management. The changes in managers´ functions, the implementation of new and unused managerial strategies, and the changes in organisational structures could be added to the management changes. Many times it is the management changes that changed, beyond recognition, stagnating companies into prospering ones. In our article we have focused on just one particular change, namely the application of new and unused managerial strategies in a company – the embedment of knowledge management in a company.

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