

KNOWLEDGE MANAGEMENT AND ITS IMPLEMENTATION

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Abstract: Recently, knowledge management (KM) has become a very popular business concept. Unfortunately, there are still problems connected with the incorporation of KM into an organisation in the Czech Republic. Examples of these problems are a lack of utilisable methodologies of KM implementation in the Czech Republic that are described in sufficient details, strong technological orientation of KM implementation, different perception of KM by different people, where KM is mostly substituted by information technologies, absence of methodologies that would take into consideration of a specific business and culture environment in the Czech Republic, etc. That is why, a new methodology was developed at the Faculty of Informatics and Management at the University of Hradec Kralove. This paper briefly describes the situation of KM in the Czech Republic and basic features of the methodology KM-Beat-It.

1 INTRODUCTION

Nowadays, many organisations focus their attention on KM with the hope of better competitiveness or performance. Unfortunately, most companies with successful KM are huge organisations like BP Amoco, British Airways or Chevron as it is described for example in (Ahmed, 2002). In the Czech Republic there is also an endeavour to implement KM in several organisations. The government of the Czech Republic has integrated knowledge aspects in to basic strategic documents as a reaction to the so called “Lisbon Strategy” (Council, 2000). In spite of this effort, successful implementation of KM is still very sporadic. That is why, a new methodology, with the purpose to improve this situation, was created.

2 SITUATION IN THE CZECH REPUBLIC

On a national level, the Czech business environment has very appropriate conditions and opportunities to work with knowledge assets and knowledge as an important organisations’ resource. The current situation, in the best way, is visible in the Programme Declaration of the Government of the Czech Republic, the Strategy of the economic

growth of the Czech Republic, the Strategy of the development of human resources for the Czech Republic or the Strategy of the Government of the Czech Republic in the EU framework.

The Programme Declaration of the Government of the Czech Republic mentions the importance of knowledge in the second part that is related to basic aims and priorities. It is written here that “...the Government will help within the framework of the European model to develop the Czech Republic as a democratic and modern social State with advanced market economy based on knowledge and able to guarantee stable economic growth...” (Paroubek, 2005). This strategic document also pays attention in one chapter to information and knowledge society.

When the Strategy of the economic growth of the Czech Republic was published, it evoked discussions that were conducted by many people from many fields. The evidence can be the huge number of articles published in journals and newspapers or reports in different mediums. Interesting is the knowledge orientation of this document that is supported for example by the first chapter with the title “Czech Republic – knowledge-technological centre of Europe with growing living standard and high employment” (Jahn, 2005). This document also suggests to “...support the creation of centres for KM and its education at universities and public research institutions” (Jahn, 2005).

Although the national level seems to create suitable conditions for Czech companies, the organisational level of KM is still very weak in achieved results. Only three problems as examples will be introduced. Firstly, case studies in literature highlight successful KM implementation in different organisations. As already mentioned, many of them are great companies with turnovers in millions of US dollars. Such companies have usually only their subsidiaries in the Czech Republic. The vast majority of Czech companies are small or medium size enterprises. Therefore, experiences and the best practices available in these case studies are usually very difficult to utilise. Secondly, KM is generally perceived in different ways. The Czech business environment is not an exception. Different perceptions cause problems in communication and cooperation. Regrettably, these perceptions are usually based on substitution of a complex KM by partial technological solutions. Of course, technological support is necessary, however, KM is not only about implementing advanced technologies. The last problem is connected with implementation of KM in single organisations. There is a lack of the methodologies of KM implementation available in the Czech Republic. Organisations have to either utilise expensive services provided by consultant companies, or if they want to implement KM without any external help, use foreign methodologies created in different environments with different conditions. These methodologies either do not reflect the needs and specificity of Czech companies or are mostly not described in full details with sufficient guidelines.

3 KM-BEAT-IT

To overcome these and other obstacles, a new methodology called KM-Beat-It was created. The design of the methodology was based on the detailed analysis of existing methodologies (e.g. A. Tiwana's KM Toolkit, K. Wiig's building blocks, Y.G. Kim's P2-KSP, Standardized KM Implementation, APQC's Road Map, M. McElroy's K-Stream, Ibermatica's methodology, On-To-Knowledge, PRORAD, CORMA, Nabla Per Partes, etc). The process of creation was composed from several stages. Activities that were performed in these stages were, for example, the analysis of existing definitions of KM, the identification of particular strengths and weaknesses of existing methodologies or the definition of basic attributes, which should be possessed by the new methodology.

3.1 Particular Phases and Activities

The KM-Beat-It consists of several phases. The description of every phase comprises of the main goal, purpose and content, basic prerequisites of initiation, a criteria of completion, key documents, critical success factors, and activities and relationship of these activities. It is obvious from this description that every phase consists of several activities. Since KM-Beat-It works with this level of resolution, there is also the brief specification of a single activity including the main goal and description, inputs, outputs and examples of utilisable methods, techniques and tools. In the following paragraphs, there is a brief outline of single phases. Detailed description with reasoning or concrete examples can be found in (Bureš, 2005).

Assembly of a realisation team is the initial phase of the KM-Beat-It methodology. The main objective of this phase is to acquire the support of the top management and/or owners of the organisation and assembly of a realisation team, that will deal with, and will be responsible for the whole process of KM implementation. In this phase, it is necessary to conduct the following activities: 1) creation of an interest about KM by top management and/or owners of the organisation, 2) weighing up of the real possibilities and capabilities to start up the process of KM implementation, 3) decision about implementation of KM, 4) nomination of team members from the top management, employees and external environment, 5) explanation of the presence of single team members and definition of their team role, and 6) definition of time of employment for each member.

Analysis of the initial state is the second phase. The main objective of this phase is to create an integrated view on the current state in the organisation from KM perspective and specification of its strengths and weaknesses. The phase of analysis of initial state comprises of the following basic activities: 1) creation of a survey of knowledge resources, 2) description of knowledge comprised in identified knowledge resources, 3) definition of knowledge processes, 4) analysis of current state of knowledge processes in an organisation, 5) description of organisational processes, 6) finding out the current state of organisational culture, 7) linkage of acquired results, and 8) analysis of strengths and weaknesses of the current state in an organisation.

The third phase is a creation of a knowledge strategy. The main objective of this phase is to create a knowledge strategy that will support the

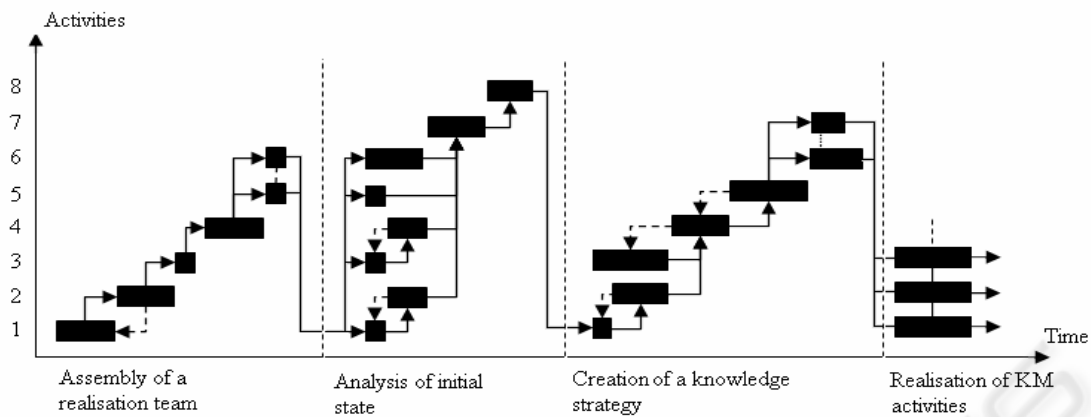


Figure 1: Phases and activities of KM-Beat-It.

business strategy and identify particular knowledge activities, which will support the achievement of business and KM goals. It is necessary to conduct these activities: 1) definition of a required state (i.e. KM goals), 2) comparison of the current and required state and identification of main gaps, 3) creation of the list of KM activities, 4) selection of activities, 5) elaboration of plans and projects, 6) creation of a knowledge strategy, and 7) identification of KM metrics and their relations to the system of organisation's metrics.

The last phase is a realisation of KM activities. The main objective of this phase is to conduct different activities, projects or plans leading to KM. It is obvious that these activities will differ in their amount, forms, time and resource requirements, orientation, or particular objectives that should be achieved in every organisation. The order of their realisation will depend on the priorities assigned in the previous phase. As examples of activities, they can be named as creation of a motivational program, establishing of a CKO (knowledge manager), implementation of intranet knowledge portal, changes in position and content of human resources management, the start of communities of practices, the implementation of an expert or knowledge system, adjustment in working places descriptions, identification of social and individual barriers of knowledge sharing, training of employees, etc. The main mutual goal should be quantitative and qualitative changes in a current state of knowledge resources and implementation or support of knowledge processes.

All activities in single phases are depicted in figure 1. It is possible to see all the iterations and loops among activities. The relative width of the rectangle refers to the time needed to perform the activity. These time estimations are only

approximations due to different needs and conditions in every organisation. This principle can not be followed only in the last phase because of diversity of possible activities.

Utilisation of KM-Beat-It methodology is the first step on the long journey to KM. Obviously, it is necessary to go back to the beginning of the methodology after realisation of all phases and perform more cycles, i.e. conduct all the phases again. Otherwise, all the used resources were consumed for no purpose. The aim of the first cycle is to "allow things to move". Only other performed cycles lead to desirable changes. In this way, continuous KM is secured in organisation. Therefore, continuous KM is presented by its neverending introduction. Naturally, with relation to the extent of implementation of KM, the existence of particular phases, along with their content will change in subsequent cycles.

3.2 Benefits of KM-Beat-It

Although existing methodologies have strong points and are utilised in practice, they contain several weaknesses that were identified during the process of their analysis. Examples can be orientation on particular areas of organisational activities (e.g. new product development), strong focus on technological solutions, dependence on pilot project and consequent interest of other departments based on acquired results, creation of a realisation team when the process of implementation is already in progress or absence of an attention paid to organisational culture. In comparison to these weaknesses the KM-Beat-It methodology brings new benefits and advantages. Among these it is possible to find for example:

- KM-Beat-It fulfils general requirements on methodologies or requirements posed on methodologies of KM implementation (e.g. McElroy, 2004);
- complexity – KM-Beat-It pays attention to all KM perspectives as described by (Beckman, 1999) and is not based only on a technological perspective; KM-Beat-It assumes the utilisation of information, communication or knowledge technologies, but does not rely on them;
- attention focused on an organisational culture and its influence on success of KM realisation;
- linkage with economical aspects and business objectives;
- possibility to use existing conventional methods, techniques and tools; KM-Beat-It is not based on specialised tools that are not common nowadays;
- applicability by medium and small enterprises that usually do not take the effort to implement KM nowadays;
- generality, i.e. KM-Beat-It did not originate in the context of any organisation or branch of industry;
- deployment of both approaches to KM realisation, i.e. “top-down” that is used at the beginning of KM implementation, and “bottom-up” that can be used in further cycles of this process;
- openness – every methodology should be able to absorb new findings and knowledge in its own domain; KM-Beat-It fulfils this requirement;
- discretion in the realisation phase, where the users are not pushed to any activities that could be useless (e.g. unnecessary investments to information and communication technologies).

4 FUTURE RESEARCH

According to (Řepa, 1999), every methodology has its own life cycle consisting of development, implementation, utilisation and further expansion, and replacement (either by new methodology or by a newer version). The first important step has been done. Now, it is necessary to continue and implement this methodology in selected Czech organisations. Therefore, other improvements and adjustments of the KM-Beat-It are not planned on a theoretical level. They will be performed in the third stage of the life cycle, i.e. during an accommodation of a little bit more general methodology to specific needs of concrete organisations. Also, there is no reason for an increasing of a level of resolution that is compassed in the methodology, i.e. dividing every

activity into detail steps. The purpose of a new methodology is not to describe the implementation process in all details and in all possible variants. The main purpose is to stress all the significant aspects and principles and focus on the process of implementation from the beginning to the end. Methodology does not have to be detailed but complete.

5 CONCLUSION

There are several problems with implementation of KM in the Czech Republic. One problem is also a lack of published details that would describe available methodologies of KM implementation in a sufficient way. Therefore, the new methodology was created. Now, the effectiveness of this methodology has to be proved by its usage in and accommodation to a concrete organisation.

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REFERENCES

- Ahmed, K.A. et al., 2002. *Learning Through Knowledge Management*, Butterworth-Heinemann. Oxford.
- Beckman, T.J., 1999. *The Current State of Knowledge Management*, in Liebowitz, J. *Knowledge Management Hand-book*, CRC Press. Boca Raton, Florida.
- Bureš, V., 2005. *Methodologies of Knowledge Management Implementation* (in Czech), University of Hradec Kralove. Hradec Kralove, Czech Republic, Ph.D. thesis.
- European Council, 2000. *Presidency Conclusions - Lisbon European Council*, [on-line]. Lisbon, Portugal. Available: <http://europa.eu.int>.
- Jahn, M. et al., 2005. *Strategy of economic growth of Czech Republic*, [on-line]. Prague, Czech Republic. Available: <http://www.hospodarskastrategie.org>.
- McElroy, M., 2004. *How to Operationalize KM*, KM World, [on-line]. Santa Clara, California. Available: www.macroinnovation.com.
- Paroubek, J. et al., 2005. *Programme Declaration of the Government of the Czech Republic*, [on-line]. Prague, Czech Republic. Available: <http://wtd.vlada.cz>.
- Řepa, V., 1999. *Analysis and Design of Information Systems* (in Czech), Ekopress. Prague, Czech Republic.