

WHY DO NOT KNOWLEDGE MANAGEMENT SYSTEMS OPERATE?

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Abstract

The topic of knowledge management is one of the most popular research areas not on a theoretical, but on a practical level as well. Researchers report on newer and newer research results, still readers might have a feeling that something was missing from the complete picture. The aim of this paper is to give a panorama about the practical application of knowledge management systems (KMS) in Hungarian companies to show the solutions, tools which cause the most problems during the realization of the steps of a KMS building. The results of the qualitative surveys (which are presented on the basis of the well-known Probst model) show that in spite of any initiations, there are no well - operated knowledge management systems of the companies which operate according to theoretical models. As the research has realized, the biggest problem is that the leaders try to carry out and to put into practice KM initiations by imperfect theoretical and unprepared managerial knowledge. That is why these initiations will be failed or will not bring in suitable outcomes. The results of this survey are a great help to build a KMS, to repair an existing system or to apply new methods and tools.

Key words: *best practice, knowledge, knowledge management, knowledge management system, Probst-style model.*

Introduction

Though people are glad that after 10 years' of uncertain, sometimes uncomprehending search there is not a single company in Hungary which has not heard of the possibility to build a knowledge management system, it does not mean anybody should be satisfied. Most – big and multinational - companies admit that they have a knowledge management system or a knowledge management strategy, their system is being built, but experience shows that these systems or ideas cannot work (Bencsik, 2013).

In earlier papers and books the results of investigations have reported, (Bencsik 2009; 2011; 2012) but now the results will be shown from a different aspect. On behalf of understanding and seeing, the logic of knowledge management system, the results of the surveys - which were conducted on the basis of the most popular Probst model (Probst et al. 2006)–should be made understandable for each reader that the summary of the model is essential.

Problem of Research

According to a classical interpretation to manage human knowledge (to manage and exploit knowledge) means every activity which has an aim to map, to collect, to systematize, to share, to develop and to exploit the accumulated, documented implicit knowledge, professional skills and experience effectively. This definition determines an activity-series which represents the management of knowledge as a cyclical process. This cyclical process is advanced, developed and it turns back to its own starting point to ensure a continuous way of thinking and to care about sustainability of the operation of the model (Davenport, 1996; Gholami, 2013).

The above mentioned well-known Probst model (Probst et al. 2006) consists of eight elements which follow a logic and which are in close connection with each other. See below:

It is a righteous demand of companies to possess an exact and a reliable review of any kind of knowledge needed to realize their strategy (to determine knowledge priority/goals) and to know if this knowledge is available right now in their organizations or not (knowledge identification). On the one hand, companies have to analyse the data-, information- and knowledge processes to identify the existing knowledge and these processes have to be evaluated by organizations, if they are suitable for the requirements of companies or not. On the other hand, the data-, information-, knowledge demands have to be determined on the basis of process analysis (Probst & Raub & Romhardt, 2006).

Knowledge acquisition can occur in formal or informal way, too. According to Davenport and Prusak (2001) informal networks are more accurate, but personal relationships are demanded. At the same time as knowledge spreads from mouth to mouth, these networks establish the basis of successful knowledge changing that is the trust.

To collect knowledge is not enough, because to get a real competitive advantage for companies via the help of knowledge management, knowledge has to be developed for personal and on an organizational level as well.

The aim of knowledge sharing/distribution is to multiply knowledge inside the companies. Knowledge sharing consists of two parts: to transmit and to absorb knowledge by a person or a group. If the knowledge receiver does not receive knowledge, knowledge sharing cannot be realized. (Tomka, 2009).

Knowledge application has to ensure that the knowledge is used productively and it is used to increase the efficiency of companies. It is the main aim of knowledge management idea. If companies do not use knowledge, all the efforts are in vain (Süle & Földesi & Botzheim, 2011).

Knowledge storing means to ensure that the identified, acquired, developed, shared and used knowledge should be made available for employees in the future as well. Continuous, regular and conscious actualization, updating and a data protection belongs here instead of unwarranted penetrating. This step includes phases of fixing, systematizing, storing and refreshing (Ercsey, 2011).

The last element is a knowledge assessment / control which is not in the focus of companies. Namely, those things/results that cannot be measured exactly, those things/results are not too important for companies. Knowledge assessment verifies reaching strategic goals and it makes the changing of organizational knowledge visible (Probst et al., 2006).

The elements of knowledge management system have to be investigated from a system viewpoint consideration with connections. To operate a knowledge management system in a company in an effective way, a knowledge based culture is indispensable which is influenced by a trust based atmosphere. Such motivation and other systems have to be formed which incline employees to share their knowledge, to work and to think together naturally (Senge, 2006).

In the next chapter the logic of the Probst model will be followed. On the basis of the model the main obstructive facts will be shown which make to build and to operate the knowledge management systems impossible in the practice of Hungarian companies.

Research Focus

The topic of knowledge management is one of the most popular research areas not on a theoretical, but on a practical level as well. People find papers, dissertations, etc. every day, which reports on newer and newer research results, still readers might have a feeling that something was missing from the complete picture. Earlier published papers (Sabherwal & Becerra-Fernandez, 2003; Leibold, & Probst, & Gibbert, 2007; Maier, 2007) report on the general problems of separated steps of knowledge management systems, especially on knowledge sharing problems (Abou-Zeid, 2002; Probst, 1998; Mertins, & Heisig, & Vorbeck, 2003). But there is

not a complete survey about operation of knowledge management systems in Hungarian companies. This survey remedies a deficiency and its results will be interesting not only in Hungary but in different countries as well.

This paper summarizes the essence of the earlier surveys which were conducted on the application of a knowledge management system in Hungarian practice. This paper strives to reveal the problems in the background and the ones which originate from the lack of Hungarian cultural and economic conditions, from the ethical and moral connections which appear in the companies.

Methodology of Research

General Background of Research

Investigation of knowledge management systems and their practice in the Hungarian companies, the used methods and tools, their connections with other processes in the companies were continued between the years 2006 and 2013. These researches were run with different goals and focuses in more instalments. Methods of the investigations were qualitative and/or quantitative technics. In this paper the results of the latest qualitative research will be shown.

The investigation was conducted with the participation of 43 companies. Companies were collected from every area of the Hungarian economy, but this sample is not representative. It does not conform to the composition of the Hungarian economy from the view of sector, size or ownership relations. But on the basis of the sample size we can take an overall characterization of knowledge management systems building and functioning.

The size and operational area of the investigated companies are listed below. (Table 1).

Table 1. Size and operational area of the investigated companies.

Investigated companies	Number	Size	
		Big/multinational	SME
Manufacturing companies	31	15	16
Financial institutions	3	3	
Service companies	4	3	1
Government institutions	5	3	2
Sum	43	24	19

Sample of Research

In the research the investigated units were Hungarian SMEs, in given situations big/multinational companies, profit oriented and non-profit organizations. The investigation of the organizations helps to get a comprehensive view of the application of best practice or the least used practice of initiation and management of knowledge management systems (Miles & Huberman, 1994).

To have a representative sample was not an aim in that case. In the selection of the sample's elements the aim was to have a many-coloured sample, therefore a judged sampling was used. The interviewed people were chosen from the circle of high leaders' level (Malhotra, 2008).

Instrument and Procedures

On behalf of a possibility of approximately equal evaluation, an in advance fixed logic was used to appraise and to analyse leaders' opinions. From this logic there were not deviations, only sometimes and slightly in certain cases (according to a given situation). The steps of the survey were:

1. On the basis of interviewed people, of information and of first intuitions a generally characteristic picture was determined about the sample.
2. Analysis of information, relationships, connections and determination of deviations which were obtained answers (from the questions/steps of the Probst model).

Qualitative methods serve the understanding in the first place and they are based on relatively small samples. In these researches the necessary information could have been acquired by direct methods, therefore deep interviews and focus groups were used (Malhotra, 2008).

In a given situation the advantages of teamwork were preferred or in other situations individual opinions were in the focus. The logic of interviews was fixed in advance. This way we limited areas which were important to reveal. (The questions were determined by the steps of the Probst model).

Data Analysis

During the evaluation of the results (text analysis of interviews), the outcomes of the earlier quantitative (diagnostic) researches were kept in view. This way the consequences of personal effects of qualitative investigations were managed in the course of formulation of conclusions.

The results, the formulated conclusions are completed in the following chapters with personal experience of colleagues who participated in this research.

Results of Research

According to the above mentioned logic, the steps of the model (Probst et al., 2006) serve a basis to summarize our practical experience. See the relationships of the model steps. (Figure 1)

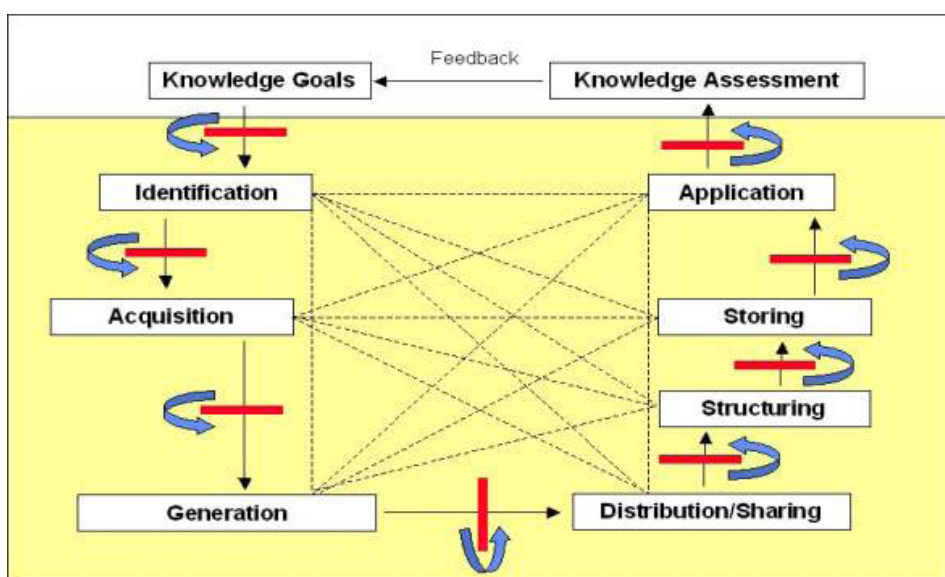


Figure 1: Relationships of Probst model steps (Probst et al, 2006).

As it is shown, the steps of the model build on each other and there are connections among them. It projects a demand in advance, namely leaders have to be capable of recognizing, seeing and keeping in view these connections continuously. In the following eight points (eight steps of the Probst – model) some problems will be shown which originate from leaders' interviews.

1. Knowledge priorities/goals. These goals come from companies' strategies. (Polányi 2009). What kind of problems can be realized in this area? (The problems below are listed on the basis of leaders' answers.)
 - In most cases the practice shows that in case of SMEs there is not a strategy at all (Bencsik 2011). There is none and they do not want to deal with it. Their aim is survival, to this it is not necessary to have a strategy, just shrewdness. The smallest companies do not find it important to think at a strategic level, the leaders of these companies do not have enough knowledge or preparedness to prepare any. That company, which understands the importance of a strategy, does not have enough money to finance an expert to prepare a strategy.
 - In cases of big/multinational companies the lack of a strategy is rarely characteristic. In their case the strategic ideas come from a high level and they cannot reach the suitable levels. Very often occurring problem that leaders at different levels do not agree with the higher ideas. That is why their own interests overwrite the central ideas and other strategic aims will be in their focuses.
2. Knowledge identification. If the previous phase is missing, this step is non-existing (Davenport/Prusak 2001; Lakatos 2005). During the survey more typical solutions were found.
 - If there is no strategy, there is no next step (identification) and companies try to fit the requirements of present, try to keep their quality and quantity at the same level. They do not develop, they do not overstep. As long as the market has a demand, the presence of products or services, companies can operate (live from day to day), but their further luck is the question of the future.
 - In case of big/multinational companies the most frequent deficiencies are that it is not known what kind of knowledge is inside the company. Leaders know the preparedness of their employees generally but there are reserves in all cases. It means that they do not have knowledge or competence maps, they do not have an up-to-date, reachable, exact database about the inside useable knowledge.
3. Possibilities of acquiring the missing knowledge (Bencsik 2009; 2011; 2013). In this research leaders mentioned the following problems.
 - There is a big problem independently from the financial possibilities that there is no real selection of applicants (Corruptions and protections).
 - The other possibilities of knowledge acquisition are – beyond the standard solutions - unfair methods mentioned by leaders. For example corruptible or seduceable colleagues, stolen ideas, buying up companies or bringing companies to ruin.
4. Knowledge development/generation. (Bencsik 2009; Bencsik et al. 2009; Ratten/Suseno, 2006) The problems were mentioned in the following forms.
 - There is no money to teach and to train employees. It is a characteristic and a returning financial problem of SMEs;

- Companies do not know what should be developed. If they do not have a strategy or a vision, they do not know how to prepare for the requirements of the future;
 - It is possible that a new employee brings new, better, higher level knowledge into the organization, but the existing staff does not want to accept it, they are not interested in this new knowledge, they do not want to know what is useful and what should be inbuilt into their processes.
5. The most critical phase of a knowledge management system is to create of conditions and possibilities of knowledge sharing/distribution. (Probst et al. 1999; Bencsik 2013; Kiss 2009; Szerb 2008; Tjakraatmadja et al. 2011). Here are some mentioned problems.
- In regard of employees' knowledge sharing the generally experienced behaviour and practice are summarized in two words. No Way! Declarations were collected from women who started their maternity leaves and from employees who changed their positions that they are not interested in a complete knowledge sharing. If a new colleague is better in a sphere of activity, they do not have a possibility to turn back from the maternity leave or from abroad, etc.
 - In cases of the finally leaving employees the interviewed leaders reported about such situations as evacuated accounts, deleted winchester, eliminated documents, discouraged customers etc.
6. Knowledge has to be structured and fixed/stored in the organizational memory, the necessary information has to be reachable for everybody (Lakatos 2005; Lengyel 2005; Farkas 2013; Chu et al. 2011). An interesting answer is below.
- Most companies deal with IT very seriously. Huge amounts of money are spent to develop and to adapt new versions again and again, they use the best informatics solutions. Too much information is the same problem as insufficient knowledge. Employees are covered with unrequested emails, data, unnecessary information and they cannot decide what is important or what is to be ignored.
7. Knowledge application (Probst 1998; Raisch et al. 2010). A mentioned critical problem is here.
- It is very difficult to assess how much an employee could be developed during a training or teaching. But it is much more difficult to assess how an employee builds this knowledge into his/her everyday work. (It is especially difficult to measure the development and growing of knowledge in case of soft skills, for example, in case of a communications training, teamwork, conflict management, personality development, etc.). As the development of these knowledge elements is tackled with difficulties, the consequences of their usage or the lack of their application is measured in a more troublesome way.
8. Knowledge assessment is a feedback to employees and to leaders, too. How does the knowledge fit the strategy, can the company do justice to the long term goals by using this knowledge? (Phipps & Prieto 2012; Bencsik 2013). Some experience from the interviews is below.
- The interviewed leaders mentioned a single possibility only in this step of the Probst model which is the performance appraisal. The application of this method is not characteristic in case of SMEs, but in case of big/multinational companies it is a regularly used and an indispensable tool.

- A company's leader said that assessment is not really acceptable if it is not based on real performance, knowledge utilizing. In most cases there is no any consequence of the appraisal, (except for personal conflicts or insults) therefore this method is not handled seriously by employees or leaders.

Discussion

Previous papers have reported on launching of KM systems in different companies, (Li-Su & Quaddus & Rowe, 2011; Denford & Yolande, 2011; Schiuma & Lerro, 2011) on failed or successful KM projects, (Bhandar, 2010; Gökmen, 2011) but about general experience on the basis of Probst model - like in this paper - researches have not been found. (Rasoulinezhad, 2011; Edwards, 2011; Magnier-Watanabe & Benton & Senoo, 2011). Typically, about investigation of one or the other KM steps, methods, tools, their successful or less successful application, or about different launched KM systems which have different logic, there are available sources (Lech, 2011; Eggs, 2012; Massaro & Bardy & Pitts, 2012). As practical survey results could not have been found in the scientific literature about samples of numerous concerned companies - like in this research -, supposedly this paper can be a great support for companies which endeavour to operate a KM system.

The above summarized leaders' opinions originate from the qualitative surveys which were continued with the participation of SMEs, big/multinational companies, institutions, etc.. On the basis of eight - steps Probst model this research investigated the problems of knowledge management system building in the companies. In this paper a small segment of the results was shown only, but you have to know that these problems appear in most Hungarian companies. These problems hinder their initiations to create a well-operated knowledge management system building.

Referring to the above highlighted eight phases of the Probst-style model, there is a short summary below:

- Knowledge goals/priorities: slightly characteristic, imperfect, lack of interest among managers;
- Knowledge identification: slightly characteristic, if there is no strategy, it makes no sense;
- Knowledge acquisition: cultural, moral, ethical, economic problems appear;
- Knowledge development/generation: companies do not know what should be developed, they do not see their interests, they do not spend money on it;
- Knowledge sharing/distribution: next to impossible to ensure, only the force can operate;
- Knowledge application: automatic expectation without control, it does not fill its role;
- Knowledge storing: too many IT is a disadvantage rather than an advantage;
- Knowledge assessment: slightly characteristic, there is no shaped methodology.

Conclusions

People have to know that there are expectations in each situation. Researchers have found good solutions, pleasant atmosphere in workplaces, but generally this style is not characteristic. In addition, this paper aims to show main problems, not best practices. This research wanted to open minds and eyes to realize that there is no interest in investing money and time it is an unnecessary endeavour, if a leader recognizes the above shown problems in his/her company. Firms, businesses, companies need to have leaders and managers who have professional knowledge to initiate a knowledge management system building consciously.

In this paper a small segment of the results was shown only, but you have to know that these problems appear in most companies. These problems hinder their initiations to create a well-operated knowledge management system building.

To build and operate a knowledge management system is not too easy. As the above shown problems project, our companies have not prepared themselves for this economic challenge. Our managers have to learn a lot, how to form a suitable knowledge centred strategy, how to acquire the best employees with the best knowledge and how to handle them due to ensure a supporting atmosphere. To realize these challenges the most important task is to form an organizational culture which supports knowledge sharing and common work. With these tools a well-operated system can be realized and the most important knowledge will be preserved in the company. The leaders have to see and understand that this way might lead to success in the market.

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