PERSONAL KNOWLEDGE MANAGEMENT AS AN ICEBREAKER

Motivating Contributions to Knowledge Management Systems

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Abstract: Personal Knowledge Management (PKM) includes a set of techniques that individuals can use to acquire, create and share knowledge without relying on technical or financial support from the employer. The purpose of this study is to find indications of detectable value from experimental implementations of PKM systems in a number of organisations. The study includes 75 implementations of a PKM system in 75 different organisations and evaluations of them all. The results from interviewing all employees that participated in the study showed that: 1) The implementation of PKM does not require extensive resources 2) The effects can be measured from a personal level, and 3) The employees assessed the positive value of the descriptions of personalised knowledge.

1 INTRODUCTION

Lack of employee motivation is a well-known problem related to the implementation of Knowledge Management (KM) systems. This motivation includes both motivating employees to contribute with knowledge and motivating employees to use the available knowledge. Motivation can be achieved in three ways:

1) By specifying objectives. This is done by the management specifying visions and values, with a focus on the knowledge processes in the organisation and thereby inspiring the employees who become conscious of what the management wants from them. There are many studies that points to problems with such an approach (Price, 2004). If people believe that their contribution is for the management only, they will be less motivated to participate in the knowledge sharing processes.
2) By reward systems. Systems range from monetary rewards for each measured contribution to rewarding employees by a public recognition of their contribution. Some authors claim that knowledge cannot be bought (Denning, 2000), while others claim that it may work if it is implemented the right way (Armstrong, 1999).
3) By workspace design. The third way to motivate employees to contribute and share knowledge is to create work situations, which may inspire an increase in the interchange of ideas. There exist well known examples of how this can work (Dixon, 2000) but it is also known that such strategies require focused initiatives, preferably by some kind of participating experts or knowledge champion, before it may work.

Whichever of the three above types of motivation is used when implementing a Knowledge Management strategy, the common denominator for all of them is that they all require considerable corporate resources in order to stand a chance of success. Before the management invests in such a KM project, they need to be convinced that the project will provide enough pay-off to motivate the investment. It is, however, difficult to measure return of investments from KM. Especially since it may take many years before the

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KM investments may provide any clearly detectable value.

If Knowledge Management is not implemented as a global system in the organisation, but instead on a personal level as a system aiming at improving and identifying individual competence, motivation can be created in alternative ways:

1. People are more willing to share what they know if they get direct and personal feedback on it (OECD 2000).
2. People get motivated if they experience that they learn while they reflect on their own knowledge (Nonaka & Takeuchi, 1995).
3. Allowing people to describe their situation from their own perspective helps them to synchronise their descriptions with the way they prefer to experience their work situation. If people feel that what they have a personal value for doing something they will be less hesitant to contribute with their knowledge (Jones & Thomas, 1997).

By being implemented by one person at a time, productivity and enthusiasm can be increased and the technological and social barriers of top-down, 'global' systems can be overcome (Barth, 2000). We further assume that it is easier to find indications of return of investments if Knowledge Management is implemented on a personal level. KM is believed to work best when people themselves take the initiative and responsibility for what they know, don't know and need to know. This also enhances the intellectual capital of the organisation (Barth, 2000).

We will investigate the indications of the participants' motivation and the return of investments from PKM in relation to KM. The PKM system evaluated in this study focuses on the individual's knowledge concerning work processes, personal networks, relations, self-awareness etc. The evaluated system was presented as a general outline, all evaluators were, after that, asked to tailor-make the system in detail for each user. Therefore there is a slight variation in the different systems used. This variation shows the width, usefulness and applicability of the general approach.

2 THE PURPOSE OF THE INVESTIGATION

The purpose of the study is to find indications of detectable value from experimental implementations of PKM systems in a number of organisations. We will not investigate to what extent PKM may be useful for the organisation as a whole since this would require a much larger study. We assume that if individual employees experience their efforts with PKM as useful and rewarding, the use of the approach will be increased within the organisation.

3 PKM IN THEORY

PKM is a way to make use of the value that could be generated if everyone made the best use of their knowledge and also felt motivated and empowered (Higgison, 2004). It is also a tool to help people reflect and thereby learn; existing knowledge is identified and can therefore be enriched and developed. PKM includes a set of techniques that individuals can use to acquire, create and share knowledge without relying on technical or financial support from the employer. The view on PKM can in certain contexts be somewhat limited. PKM does not only equate technology and tools, but is rather about organising thoughts and developing individual competencies. PKM builds partly on the idea that KM cannot succeed unless every person takes personal responsibility for what he or she knows and does not know. PKM can be said to be a framework designed for personal use that includes personal habits, preferences, decisions and networks. Our personal network is considered our most valuable knowledge related asset (Grey, 2003) and "the key to becoming an achiever is to record personal decisions" (Drucker, 2000). PKM shifts the learning and sharing responsibility as well as the networking from the company to individuals and aims to help people understand how their personal values and goals relate to these networks and this knowledge. People's values and goals are part of their identity and personal identity is an important aspect in PKM, by using PKM unarticulated assumptions can be made clear (Grey, 2003). PKM furthermore aims to uncover latent potential in people and maximise their personal effectiveness (Higgison, 2004). Just like most KM systems, PKM systems aims to facilitate the share of knowledge but PKM systems also aims to make the knowledge more explicit to the owners themselves, on the basis that knowing yourself might be an as important focus as sharing.

4 IMPLEMENTING AND EVALUATING PKM IN 75 ORGANISATIONS

There is evidence that KM implementations require a professional 'knowledge champion' to be

successful (Skyrme, 1999). By adopting the PKM perspective and thereby make each individual personally responsible, everyone becomes their own champion. In order to be able to test the proposed PKM in as many organisations as possible we gave 75 master students the task to each implement the PKM system with one employee in one of 75 organisations. A majority of these 75 employees had some kind of management position, which we defined as an employee who has more than four subordinates. We assumed that such a large diversified population would result in enough quantities of collected information to enable us to draw some conclusions concerning if the proposed PKM system could be valuable. With valuable we mean not requiring much effort to be implemented yet still producing useful results.

4.1 Simulation of PKM and Skills Training for Implementers

Before implementing a PKM system in an organisation, the students participated in some training. The training was carried out as a simulation of the whole process in smaller cases. The training prepared and familiarised the students to the role as assisting mentor, as a knowledge champion and as a system designer. They were trained to:

1. Motivate a person to reflect on his/her knowledge in a similar way as a therapist motivates a patient to tell the most relevant stories from past experiences. This includes interview technique and listening technique.
2. Extracting the essence from provided stories and knowledge descriptions, and from these extractions create compact descriptions or useful rules of thumb of for example work processes. An important part of this process is valuating the knowledge.
3. Standardise or generalise the rules of thumb by translating them to domain independent words that could be easily understood by employees who are not used to the local 'buzz words' within the organisation.
4. Evaluate different implementations of PKM.
5. Evaluate the estimated availability of the knowledge in the system by testing the descriptions on third party subjects.

4.2 Evaluating PKM

All students were provided with templates for asking questions for acquiring and structuring knowledge. The template consisted of four headers where each header was followed by large set of proposed questions. The headers were:

1) Your present situation? Including for example current work processes, best practices, core competencies, personal network, goals, values, skills and attitudes.
2) Your preferences? Including ideal design of work processes, need for knowledge, how to achieve improved control, how to acquire personal effectiveness.
3) How can you get information? Including knowledge and information providers, incentives for receiving knowledge, how to present a need for knowledge.
4) What kind of information/knowledge do you have that you can share? Including feedback and response to it from superiors, colleagues, subordinates and preferences for sharing knowledge.

Each of the students then adjusted this template to the situation at the organisation where he or she would test the system. The students were asked to carefully consider the aim and objectives of their PKM system, and some freedom concerning these issues was given here. Suggested objectives included helping people structure his or her personal knowledge, externalise tacit knowledge, bring out knowledge to be shared or motivate by showing the uniqueness of that particular persons knowledge.

The template might be said to represent a view on PKM that even more strongly emphasises socialisation for all steps of the KM process and focuses less on tools and technology, our template is not especially designed for independent knowledge workers. Before the template was provided to the students they had received teaching concerning how to search for knowledge, define it, classify it, name it, evaluate it, in a similar fashion as is done in the Anderson Edge Workshop (Frand & Hixon, 99).

4.2.1 Design

The students were to some extent free to design the contents of their PKM systems. The systems could be based either on a personalisation strategy and/or a codification strategy (Hansen, Nohria & Tierney, 1999). A few systems were designed as expert locator systems aiming to facilitate the company's use of existing competence rather that buying similar services from external consultants. An expert locator would also be useful when putting together project groups. Most systems were designed so that some information and knowledge could be stored in a database and thereby be accessible to all. However,

several students discovered that some knowledge could not be explicitly expressed. A concern among the students about the risks with a too static system was also identified, therefore some students concluded that the system should include some kind of personalisation strategy. The students usually described a system with a database as well as other activities such as seminars, discussion groups etc. The design of the implementation of the system built on individuals together in pairs, to mentor each other in their championship. Having a critical friend that supports the reflective process by for example asking questions can be a great support in a person's professional development (Dahlgren et al, 2006, Handal, 1999).

4.2.2 Evaluation

The following evaluation criteria were proposed for evaluating the implemented PKM system, but the students were given some freedom to adjust these criteria to the individual organisations.

1. Personal experience of PKM
   1.1. Do you find answering the PKM questions and using the PKM approach useful to you?
   1.2. Have you learned or realised something new about your professional situation through these interviews?
   1.3. Would you recommend the PKM approach or a similar system to your colleagues or friends?

2. The general usage
   2.1. How could these interviews and the answers be used?
   2.2. To what extent could the PKM be practically used by other employees?

3. Cost and benefits, i.e., how do the costs relate to assumed benefits from using the PKM
   3.1. How can the system be implemented?
   3.2. What resources are needed?

In all 75 organisations the students asked a number of questions about the aspects above. The summary of all answers was interpreted and conclusions were drawn for each of the categories.

5 RESULTS FROM THE EVALUATIONS

We used the results from the 75 evaluations in order to determine to what extent the estimated benefits were greater than the needed resources for implementing the PKM system. We interpreted the results from each evaluation according to if it claimed that the evaluation criteria above were satisfied, and then we added all results in order to determine the general trend for each criterion. There was much variation among the results. In 27 of the 75 reports we had to discuss the results with the authors in order to clarify the validity of their classifications. This also provided us with an opportunity to probe deeper into their reported experiences. Finally we summed up all positive and all negative answers concerning the interpretation to what extent the criteria were satisfied

5.1 Personal Experience of PKM

In all evaluations the reactions of the employees were positive to the PKM system. Some experienced an increased awareness concerning their competence after having participated. Participation also led to reflection of the current state of things. Most employees stated that they enjoyed the actual interview.

5.2 The General Usage

The evaluations showed that the respondents found it easy to produce the type of knowledge descriptions that were used in the PKM systems, although some kind of introduction or 'warm-up' could be recommended. Most evaluations showed that the respondents would read their colleagues knowledge descriptions and that the system thereby would be used. The classic KM problem that all people might not be as willing to share their knowledge with others is still valid here, but with the personal approach, the responsibility put on each employee increases the sharing. An implemented system provides an overview over how knowledge and information is used and made available for the organisation. This is most useful according to some of the interviewed managers. The systems also showed possible critical knowledge gaps or redundancy in the organisation.

5.3 Cost and Benefits

The evaluations showed that due to the personal approach the implementation of the system can be made gradually and therefore no major disturbance to the normal activities in the company are necessary. The evaluations also showed that the employees claimed that they would benefit from having similar types of descriptions accessible. One

of the implementation was based on four steps: Gathering, organising, refining and disseminating information. Several respondents found the system so beneficial that the students presenting it to them have been called back for discussions about running an implementation on a larger scale in the company.

5.4 The Validity of the Evaluation

The weakness of the evaluation is that it is based on personal estimations of the subject. However, several or even a majority of the participants were knowledge workers and many of them where well familiar with KM and had earlier tried other approaches to knowledge sharing and learning.

6 DISCUSSION

The list below illustrates how the PKM system relates to conventional KM concerning planning, motivation, costs and risks.

Planning needed before the system can be initiated
- **KM**: Long time
- **PKM**: Short time

The need for extrinsic motivation
- **KM**: High, since the individual employee cannot relate the knowledge to his/her own needs
- **PKM**: Low, since more personal satisfaction when discussing knowledge related topics from a personal perspective

Implementation Costs
- **KM**: Requires extensive resources, similar to what is needed for implementing any large system in an organisation
- **PKM**: Requires less resources since the implementation is done as an addition to existing report routines

Risks
- **KM**: High, since the whole project requires extensive resources before it can be implemented
- **PKM**: Low, since it can be tested on a small scale and successively enlarged

The results indicate that employees approve of the proposed PKM system and are willing to use it. The results also shows that the proposed PKM system can be implemented incrementally in an organisation with limited costs which in turn shows that the proposed PKM system could produce enough return of investments to motivate an implementation in the daily routines of an organisation. A PKM system can be used not only to share knowledge but also to help people verbalise and validate unarticulated assumptions, tacit knowledge, core competencies, goals, visions etc. This will support the user's personal as well as professional development and thereby their lifelong learning. By working in pairs as mentors/mentees or critical friends during the implementation process this development is further supported and personal networks strengthened.

Since the PKM activities that are described here are closely related to the type of educational and development sessions that are common in most organisations today, we assume that this will make them even less resource demanding than other types of KM activities. However, we have not yet done any extensive calculations concerning the demand for resources to implement a global PKM project as proposed in this paper.

The basic findings presented in this paper are part of the findings for a licentiate thesis (Stenfors-Hayes, 2005) presented at Stockholm University.

In the future the authors intend to evaluate to what extent the proposed PKM system could be used in larger implementations including the routines of planning work tasks and stating objectives for employees.

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