Knowledge Sharing Cultures in Finance and Insurance Companies – Needs for Improving Informal Collaborative e-Learning

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Abstract—**Working life requires employees to continuously update their competences, making lifelong learning an important but challenging part of professional development. This study aims to look for solutions to uncover the tacit and implicit knowledge within the enterprise by the means of social media. Our interest is specially focused on challenges on informal learning and refining and sharing of the tacit knowledge among these expert companies. We have so far collected data from two enterprises about their current knowledge sharing habits and procedures and found out the pitfalls they have experienced in their working culture concerning finding and sharing knowledge.**

The main challenges (apart from lack of time, which is quite obvious result today) are defects in storing information in a way that enables its easy rediscovery and the huge amount of information from which to filter the relevant pieces of knowledge. Particularly the centralized experts in an insurance company find the lack of regular vertical interaction between the decentralized claim handlers a drawback. There exists a lot of overlapping effort as they need to tell the same issues many times to various claim handlers. Taking these challenges into account new working models will be put into practice utilizing collaborative tools, like wikis and chat forums.

Index Terms—**chat, e-learning, finance and insurance organizations, knowledge sharing, wikis**

I. INTRODUCTION

Working life requires employees to continuously update their competences, making lifelong learning an important but challenging part of professional development. Learning from other people has been recognized as an important way to familiarize newcomers to the work during the first years of their careers [1] but the colleagues and peer groups are significant sources for learning in every phase of the working life. There exists a huge amount of knowledge in organizations and working communities, which could be useful for large group of people, if only it can be found. This common knowledge [2] does not arise by itself, spontaneously, it needs to be found, shared and agreed.

The basic knowledge management processes include finding information, sharing knowledge and the development of new knowledge [3]. All processes affect both individual workers and entire organizations, but for organizational learning the most critical point of view, however, may be the information sharing process. Naturally, the data must first be found before it can be distributed, and knowledge construction and development processes are needed as well for knowledge and understanding to be promoted. However, these knowledge management processes as well as negotiating the meanings of the knowledge can be incomplete or partly ignored by the personnel of the organization.

This study aims to look for solutions to uncover the tacit and implicit knowledge within the organizations by the means of social media. Our interest is specially focused on challenges on informal learning and refining and sharing of the tacit knowledge among these expert companies.

In this paper we will first provide theoretical and practical background for the study discussing the different types of knowledge that can be found in organizations, the special context in finance and insurance companies and our methodological choices. We will then describe the knowledge finding and knowledge sharing practices discovered in our study as well as the challenges that have been realized in those knowledge practices. Finally we will present new working models that have been put into practice utilizing collaborative tools, like wikis and chat forums.

II. DIFFERENT KNOWLEDGE TYPES AND INFORMAL LEARNING

In this study we use concepts "information" and "knowledge" with a difference that information is something that is looked for can be found in the environments and stored e.g. in the databases. The knowledge in turn is information already acquired and/or processed by the individuals.

Knowledge can be classified as explicit, implicit or tacit [3]. Another categorization includes structured, unstructured and tacit knowledge [4], where structured means explicit and unstructured is equivalent to implicit knowledge. Explicit knowledge is set out in tangible form. Implicit and tacit knowledge are both un-codified but the implicit knowledge can be codified, contrary to the tacit knowledge which is extremely hard to be set out in tangible form [3],[4]. For example intuition, rule-of-thumb, gut feeling and personal skills are expressions of tacit knowledge, and people are the main repositories of this kind of knowledge [4]. A lot of un-codified cultural knowledge is acquired informally by the means of participation in social activities and it is often so "taken for

granted" that people do not recognize its influence on their behavior [1]. This kind of knowledge acquisition is what we call informal or incidental learning.

Informal learning is a common concept in the context of adult learning. It is often described as opposite to formal learning, which is "institutionally sponsored, classroom-based and highly structured" [5]. Informal learning is often intentional but not highly structured, and incidental learning happens unconsciously, is tacit or taken for granted [5], [6]. These are the reasons, too, why informal learning in the workplace is a problematic subject of research (see [6]). As people might not themselves even recognize the learning components of their daily work routines, researchers have to search for them for example by discussing about duties that are too obvious for the workers even to mention during the interviews [6].

Informal learning can be facilitated by critical reflection to uncover tacit knowledge and beliefs, by stimulating learners' proactivity to identify options and to learn new skills to implement those options, and by encouraging learners to wider range of options [5]. When learning new knowledge has been identified it is possible to share it with the co-workers and that is a way to increase all team members' learning and to promote organizational learning as well.

III. THE STUDY

A. Context in Finance and Insurance Companies

Finance and insurance companies are typical expert organizations where information and knowledge management plays an important role. The required knowledge comes from divergent sources. Experts need to inspect for example laws, guidelines, memos, research articles and customer documentations. Remarkable part of the work is also monitoring current and future phenomena and sudden events in surrounding world, which need to be responded to or taken into account.

A large proportion of the knowledge consists of very specific and confidential information, which is difficult to be generalized and applied to other situations or cases. For example customer information that the claim handlers handle may not be allowed to be shared in any way. This makes challenges and creates barriers for knowledge sharing and informal peer learning.

The security issues arise in strict firewall constraints of the companies' information networks too. Use of external web services may be limited or entirely forbidden. These restrictions provide challenges for inventing better ways to support collaboration and knowledge sharing utilizing e.g. social media solutions. At least the restrictions need to be taken into account and alternative ways to be found for collaborative knowledge sharing.

B. Methodology

A qualitative case study is conducted with two pilot groups. The groups have been initiated to investigate solutions for uncovering the tacit and implicit knowledge within the enterprises by the means of social media. We have so far conducted two surveys using web based questionnaires and interviewed three persons who work as centralized advisors to the decentralized claim handlers in an insurance company. Furthermore, nine interviews have been carried out too among the experts in finance and in-

surance training company, but the analysis of these interviews is in progress at this writing. In this paper we describe the knowledge practices and the challenges participants have expressed related to those practices based on the answers in the questionnaires and the adviser interviews in the beginning of the study.

TABLE I.   SUMMARY OF THE STUDY

	Pilot I	Pilot II
Participants	16	80
Interviews	9	3
Questionnaire N	15	36
Trial group	15	39
TrendWiki	Available from August 2012	-
Internal workplace with chat	-	Available from March 2013

C. Participants

This study is conducted by researchers of the Tampere Research Center for Information and Media (TRIM) in The University of Tampere in collaboration with two Finnish companies in finance and insurance business. Both of the companies are expert organizations, one of them being an insurance company, dealing with both internal and external customers' insurance-related questions, and the other is a training and publication organization in finance and insurance sector.

The first pilot group consisted of 15 experts on finance and insurance training and publication. The amount of the whole personnel in this organization is 16, and so our study involves remarkably extensively the organization in its entirety.   The duties of the personnel include planning and conducting in-service as well as qualification training, and publishing books and other learning materials for finance and insurance sector.

The other pilot group was chosen inside a large insurance company, which became even bigger in consequence of a fusion with another insurance company in the beginning of our research project.   Altogether 80 participants were asked to fill in the questionnaire, but the actual pilot group, which tries out new type of collaboration, consists of 39 decentralized claim handlers from various parts of Finland.

IV. RESULTS

A. Knowledge Searching and Storing

Typical knowledge searching conditions in our pilot companies are the need for active information retrieval and the ability to search for information. Also the need for monitoring existing and recent knowledge in the company's intranet as well as outside the company is important. The respondents were asked about their every day routines: where do they search and find information, what kind of information they look for and how and where do they store the information they have found?

So called disposable information is searched in the web and it is not saved. All the practical knowledge can not be found straight on the Insurance Terms and Conditions; a lot of tacit knowledge is hiding in established compensation practices and conventions to interpret laws, and terms

and conditions. The centralized advisors are asked for unknown terminology and some little facts. Background information in turn is looked up in official sources like government bills and other reports.

Guidelines and other materials required to get through the work have been saved in the intranet (in the insurance company). The claim handlers as well as the other experts store files also in the hard drives of their computers, in host computers, shared e-mail folders and USB flash memories. Trusted internet sites are saved in web browser's favorite folder.

B. Knowledge Sharing Practices

The knowledge sharing cultures differ in our pilot organizations as can be seen in Fig.1. The companies involved are of different sizes, which for one can affect information sharing practices, e.g. having an intranet (like in pilot II) or not having it (pilot I), or working in a same place (pilot I) or working decentralized in different areas of Finland (pilot II). However, in both pilots groups the two most applied ways to share knowledge are face to face conversation and sending e-mail, in opposite order anyway (see Fig. 1).Other equal knowledge sharing practices in both companies are discussing in meetings and printing materials for colleagues. In the training company other ways to share knowledge are also writing in a blog or a wiki and teaching in the working community.

In the insurance company the information was earlier forwarded via e-mail, but nowadays the attempt is to save information in the organization level intranet, where each individual retrieves what he or she needs. In the training company there is no intranet and the e-mail is the main channel for knowledge sharing.

Other knowledge sharing practices according to the interviews include in-company training and work orientation, teleconferencing, e-learning environment and work community meetings.

As can be seen in preceding paragraphs, the companies have several means to share knowledge, but still there exist no established practices or technological platforms for conscious and continual knowledge sharing. Moreover, all local organizations (where the decentralized claim handlers work) may not have their own intranet.
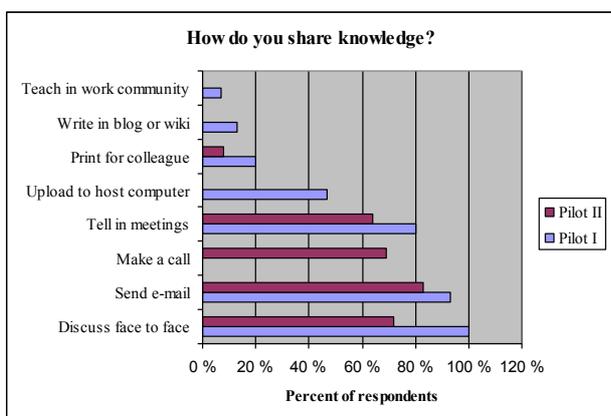

Figure 1. Knowledge sharing practices I: *How* do the people in finance and insurance training company (Pilot I) and in insurance company (Pilot II) share knowledge.
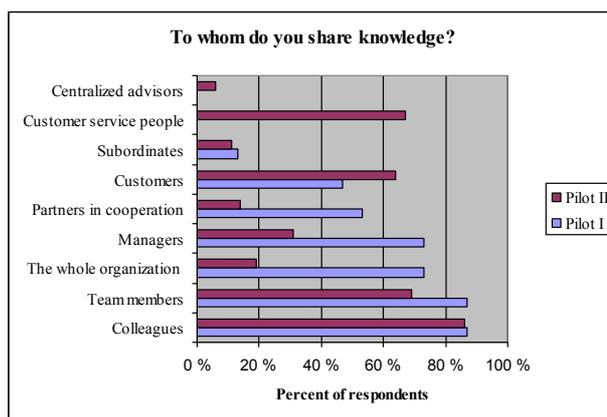

Figure 2. Knowledge sharing practices II: *To whom* do the people in the finance and insurance training company (Pilot I) and in the insurance company (Pilot II) share knowledge.

In Fig. 2 can be seen that the colleagues and own team members are the most common knowledge sharing partners in both pilot groups. Again, there can be seen differences in frequencies which are mostly based on the sizes of the companies as well as on their main business objectives (training or customer service).

C. Challenges

The respondents were asked to describe the possible challenges they have faced at work concerning both finding and sharing of knowledge. Haste and lack of time were in both pilot groups the most common drawback. However, this is quite a universal phenomenon all over the working life today and was a presumable result too. It was challenging to find enough time for information retrieval but also for sharing it. Observing and filtering of essential and necessary information are time-consuming and the second drawback many respondents mentioned was thus information overload.

There becomes so much information that it is difficult to allocate it to the right group of people and precisely to the person who most would need it. -A claim handler-

Information is stored in various places, which makes it difficult to remember where precisely the designated piece of information can be found. Even if the information is saved in the intranet, each person needs to know what exactly she or he is looking for and how this information can be found. In our pilot companies no satisfying shared or mutual store for knowledge has been organized.

In the insurance company the interviewees emphasized the lack of regular vertical interaction between the decentralized claim handlers:

There is also the same problem now among those who we are training, so that we are providing the information to one person, but there exist a hundred other people who don't have it, and then there may be 99 people asking the same question...- Expert advisor-

If they were not asking the same questions one by one to the advisors, the working of the advisors could be better concentrated on the other issues, e.g. updating the information or monitoring the changing environment. However, the questions asked to the advisors are not systematically saved and this of course further increases the work of them.

When storing crucial information in the hard drive on one's own computer there is a big risk of accidentally us-

ing obsolete knowledge for example in decision-making process. The centralized advisors regularly update information in the intranet and the purpose is that every body retrieves the information there – not from the hard drives of their own computers.

One problem is the compatibility – or lack of it – of different information systems: how to facilitate the storing and sharing of information gathered.

V.   RESPONCES TO THE CHALLENGES

There is clearly a need for shared databases accessible both to specialists and to the claim handlers in the insurance company. Good and practical information retrieval systems are needed too for searching for new information, but also to find the information that has been saved once before. This concerns the training company too. There is also need for achievable up-to-date information and the appropriate channels to share that information and knowledge between colleagues working geographically near as well as far away. The information needs to be easy to find and apply in one's own work. There should be timely knowledge available which is easily allocated to the right people.

We have responded to the challenges in two ways. A special wiki tool, the TrendWiki [7], has been tried out during four months period in the finance and insurance training company, and a new e-learning workspace including a chat tool has been put to use in the insurance company.

The TrendWiki is a tool that offers a platform for easy collecting, analyzing and sharing of information relevant to the business objectives. The program automatically collects in certain information from the web pages the user stores to the system, such as text, images, and keywords. Information found outside of the web can be entered to the system as well, and users can add keywords, comment on and discuss the content. The analysis of the user experiences with TrendWiki is in progress, but the first comments arisen from the interviews have been promising.

The new workspace with the possibility to chat with peers on work related issues has been initialized in the beginning of March this year and the experiences from the trial period will be collected next fall. Using this workspace the claim handlers can discuss for instance about example compensation cases the layers of the company and the centralized advisers have set to be read there. The guidelines and other directions have been saved in the same place too and the expectations of the advisors include that the chat could attract the claim handlers to retrieve at the same time the up-to-date information there.

VI.   CONCLUSIONS

In this paper we have presented the knowledge finding and knowledge sharing practices of two groups of expert workers in finance and insurance business. This case study indicates that the knowledge practices in expert or-

ganizations might be incomplete, which may result in overlapping work, unnecessary haste and at worst incorrect judgments if non-up-to-date information unwittingly is used.

We have propounded collaborative social media tools as one possible solution for the challenges in knowledge practices. However, our study concerns only two companies and the promising results of the trials are incomplete for the time being. If the finished results will approve that the means of social media are suitable for supporting information finding and knowledge sharing among these expert organizations, more extensive research is needed to generalize these findings widely.

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