

Experience – the neglected success factor in enterprises?

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Abstract. The effective use of experience as a valuable resource can give companies a competitive edge in a world characterised by an ageing workforce and globalisation. An online survey was conducted in Austria, Germany and Switzerland to find out managers' attitudes towards experience and if and how they capture, use and disseminate it. The results show that the majority consider experience an important asset, but do not actually support it in any systematic way. Company size and position rather than age or gender play a role when it comes to preferences, attitudes or practices. The survey shows great discrepancies between methods considered useful vs. those in regular use. Besides, there is a preference for classical people-oriented methods rather than modern IT-supported methods. Integrating experience management into project and process management practice may help overcome current barriers and reservations.

1 Introduction

More than ten years ago, studies by KPMG [2] and Fraunhofer [7] showed the high relevance of experience management for industry. At the time, the experience base of an enterprise was given top priority when IT support systems for knowledge management were installed and implemented. The rationale behind implementing experience management (EM) was to meet increasing demands in industry for process improvement approaches (e.g. Six Sigma etc.) to achieve higher and more repeatable product quality. This was to be enabled by better understanding, standardising and optimising processes and decisions by means of automation of production lines and business processes at a more fine-grained level [11].

In the meantime the rationale has shifted away from process improvement towards the demands and challenges posed by an ageing society and increasing globalisation. In the next few years many experts from the so-called 'baby boomer' generation are about to retire whose expertise and experience companies want and need to preserve. Besides, we are increasingly faced with incomplete knowledge in a world that is characterised by great uncertainties and imponderables as a result of disruptive innovations brought about mainly by digitalisation.

The experience we have accumulated over time may help us deal with these challenges, crises and conflicts. Companies and their managers are therefore called upon to make the best use of the experience and know-how of their employees. Instead, there appears to be a general trend as observed by [6] that organisations are failing to learn from their past experiences despite being surrounded by lessons learned models and guides on how to apply them.

To find out if and how companies actually document, exchange, manage and maintain this valuable resource, three universities of applied sciences from Austria (FH Burgenland), Switzerland (FHS St. Gallen) and Germany (Rheinische Fachhochschule Köln) carried out a survey in the autumn of 2015 together with German and Swiss national management associations (*Die Führungskräfte* with 8000 members and the *Schweizer Kader Organisation* with a membership of 8200, respectively), as well as the Austrian magazine *Die Presse*.

It is the first trans-border online survey of this kind and has been initiated by the newly formed European Institute for Experience-Based Knowledge (METIS), a think tank which brings together partners from research, industry, civil society and governmental institutions. The aim of METIS is to foster the dialogue between these players and contribute to and further develop successful methods for the transfer of experience-based or practical knowledge.

In the following sections we will briefly define the various concepts in relation to experience and EM, describe the methods we used for collecting and analysing the data and discuss the results of the survey. We shall pay particular attention to respondents' attitudes to methods and instruments that can be used for EM. We then explore the implications of the survey for both research and practice and ask how it could be made easier to exploit experience as a valuable asset.

2 Definitions, concepts and models

Webster's Dictionary defines experience as knowledge or practical wisdom gained from what one has observed, encountered, or undergone. The term experience or experience-based knowledge is closely related to terms such as good or best practice, lessons learned, tacit knowledge, knowledge-in-use etc. As early as 1958, Polanyi explored the distinction between tacit and explicit knowledge [15] and thus laid the foundation for Nonaka and Takeuchi [12] who made major contributions to knowledge management (KM) theory. They state that whereas explicit or codified knowledge is objective, easily communicated and transferred without in-depth experience, tacit knowledge is subjective, context-specific, personal, and difficult to communicate. It consists of cognitive elements such as cultural beliefs and viewpoints as well as technical elements, i.e. the existing know-how and skills.

The close link with KM is also made by [11] where EM is defined as a special form of KM and an Experience Management System (EMS) as a socio-technical system established for managing, reusing and recording experience or lessons learned. Research in EM therefore deals with methods and technologies suitable for collecting them from various sources, documenting, sharing, adapting and

distributing experience. It also includes the organisational and social measures required to assure that these are integrated into business processes (see also [4]).

According to [11] EM software should support a set of operations related to the reuse, adaptation and recording of experiences. But to make sure that EM activities are executed, they stress that its online components have to be directly linked to the business processes. IT solutions that can support and enable EM activities include incident management software, learning management systems, expertise location systems, enterprise content management systems, search technologies, e-discovery technology, and software for social exchange (e.g. instant messaging, blogging and micro-blogging), social networking and collaboration.

Different fields in artificial intelligence have also contributed to EM. Case-based reasoning, in particular, has played a role in the development, validation and maintenance of experience bases that may include case studies or lessons learned from projects. For dissemination and transfer of experience or lessons learned, various technology approaches are available such as formal reasoning as well as ontologies that can support the retrieval and adaptation of lessons learned.

Despite the continuous improvement of IT solutions, they have also been blamed for failure in the exchange and dissemination of knowledge and experience (e.g. [18]). As a result, there has been a move away from a reliance on IT to an approach that aligns and balances people, process and technology (see e.g. [3]).

3 Methodological considerations

For the survey, a questionnaire was developed by the academic partners and aimed at obtaining an overview of attitudes towards practices, instruments and methods with regard to the role of experience and its management and transfer in the corporate German-speaking world. Since the survey targeted senior and middle managers, the role of leadership in EM was another important issue raised in the questionnaire. Overall, we received 829 filled-in questionnaires out of which 359 from Germany, 147 from Switzerland and 51 from Austria.

The questionnaires were collected and analysed by the computing centre of the RHFH Cologne and interpreted by experts at the three universities of applied sciences. The statistics software SPSS was employed for univariate and bivariate statistical analysis to: (a) describe the attitudes of the total sample towards experience using a seven-part Likert scale and (b) to test for significant differences between subsamples, e.g. respondents from larger versus medium-size companies, using chi-squared and Mann-Whitney U tests which both allow the analysis of ordinal scaled non-normal data. At a significance level of less than or equal to 0.05 the null hypothesis, i.e. that the sub-samples (e.g. middle vs. senior managers) show the same distribution for a concrete variable, was rejected.

For comparing the three country subsamples we performed a Kruskal-Wallis H test in SPSS. It turned out that respondents from the three countries constitute three significantly different subsamples with regard to socio-economic at-

tributes (e.g. age, gender, education, position). This is largely due to differences in the membership of the German and Swiss associations and the readership of Austria's *Die Presse*. Although all respondents are managers (Führungskräfte), the socio-economic differences between the country subsamples make any meaningful comparison of national differences difficult.

Finally, we would like to point out certain constraints of our survey. For example, we had to adopt the management associations' preferred categories for company size rather than use the EU definitions. Random sampling was not possible because we do not know the total number of managers in Germany, Austria or Switzerland. Therefore we had to make do with a convenience sample and cannot make any representative statements about the total management population.

4 Results of survey

We have received just over 600 usable, i.e. completely filled-in replies, two thirds of which come from Germany (65%), 26% from Switzerland and 9% from Austria. Women account for almost a fifth of replies (18%). More than half of respondents (54%) are managers in large companies (>500 employees), 42% work in medium-size companies (10–500 employees). More than three quarters (77%) have graduated, about half have a technical, the other half a business or legal background.

The majority (85%) consider experience as an important resource for the success and productivity of their company, especially for making organisational routines and processes more efficient. However, only about a quarter of respondents claim that the exchange of experience enjoys the full support in their companies. Large companies, however, are more systematic and committed when it comes to promoting the transfer of experience.

Only about one fifth (21%) of managers show themselves satisfied with the exchange of experience across different levels of hierarchy or company divisions. The barriers are even higher when it comes to experience exchange beyond company boundaries, e.g. with customers or suppliers. This result shows that there is still a long way to go as far as the open exchange of experience and knowledge across organisational boundaries is concerned.

With regard to attitudes and preferred methods, the survey points to differences between senior and middle managers, whereas age appears to play a very minor role. Younger managers, however, are more likely to be aware of the "dark" side of experience, e.g. the danger of becoming professionally blinkered because one relies too much on established practices rather than open up to new possibilities. The professional background, e.g. whether someone has been to university or received vocational training, does not appear to have any influence on one's attitude to experience.

Generally, the motivation behind the implementation of EM is to learn from past experiences so as to avoid repeating mistakes. Figure 1 provides an overview of where and for which purposes experience-based knowledge is used.

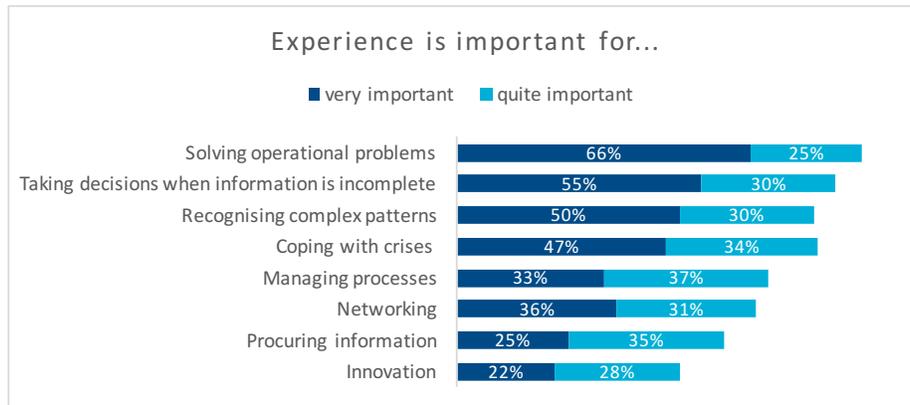


Fig. 1. Applications of experience-based knowledge

As shown in Figure 1, experience is considered as ‘very important’ and ‘quite important’ for solving operational problems, taking decisions when information is incomplete, for recognising complex patterns as well as coping with crises by a high percentage of respondents. It is deemed less important for process management, networking and information procurement. And only 50% believe that experience may foster innovation.

Figure 2 illustrates people’s attitudes towards different methods for the exchange and management of experience. What is striking is the considerable discrepancies between which methods are considered useful and their actual implementation. For example, the majority of respondents see the potential usefulness of both Succession planning and Induction programmes for new employees but few actually use them regularly in their organisations.

It also shows that many respondents have considerable reservations with regard to KM techniques such as world cafés, lessons learned workshops or storytelling (which can be subsumed under the term ‘Moderated experience exchange’), networking approaches such as communities of practice as well as social media platforms or intranets. They see them as ineffective and/or do not use them on a regular basis. Even younger managers are sceptical with regard to such tools and tend to prefer the classical management and communication tools such as informal talks and meetings. What is interesting is that women on the whole appear to be more open with regard to the possibilities offered by online platforms or social networks.

Whilst people-oriented methods such as induction programmes for new employees or mentoring are considered useful, in the ‘real world’ it is the more formal methods such as written reports, meetings or professional or further training courses that tend to dominate.

These results have been confirmed by several informal interviews conducted by W. Bruns, one of the founders of METIS, as well as in a series of in-depth interviews currently conducted in a follow-up study based on the METIS questionnaire. Preliminary findings from interviews with CEOs from companies of

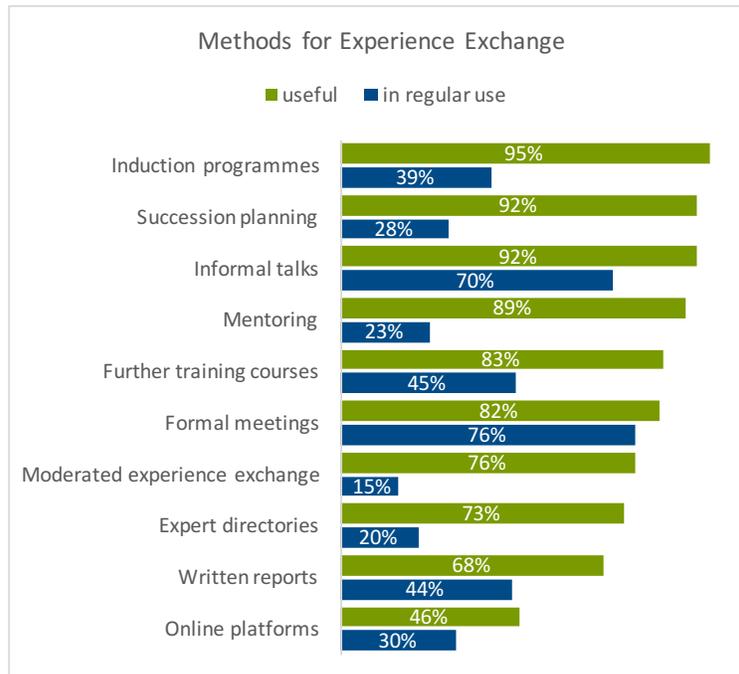


Fig. 2. Methods used for the exchange of experience

varying size and different industries show a wide-spread disenchantment with modern KM methods on the part of those (esp. large companies) who have actually experimented and/or implemented them, as well as wide-spread scepticism and reservations on the part of those who have not.

We can conclude that whilst experience is held in high esteem, little is done to actually manage and cultivate it. For example, rarely do companies offer incentives or rewards for EM. When asked for the reasons in the interviews, lack of time and resources are cited most frequently. It appears that the pressures from daily business and competitors do not allow the management to dedicate more resources to EM, even though they may consider it valuable.

5 Implications for research and practice

The findings from the survey are not particularly encouraging for those engaged in promoting modern IT-supported methods of KM, in general, and EM, in particular. At the same time, they may be a call for action because it is clear that experience and EM are attributed great importance but that there is a lack of know-how about how best to exploit this valuable resource and thus, a need for support. This in line with the findings of [6] that whilst processes for identifying lessons do exist, organisations fail to disseminate and apply them.

This raises the issue how such support can be delivered more effectively and efficiently? Do we have to change the “packaging” of our methods, e.g. avoid terminology (CoPs, world cafés etc.) that may (still) sound outlandish to the down-to-earth manager of a small enterprise? Or do we have to shift the focus of EM towards management communication or project management, e.g. by focussing on how companies can distribute successful project know-how across an organisation to ensure that lessons are learned and mistakes of the past are not repeated?

However, when managers try to turn inherently tacit knowledge into explicit knowledge they often encounter pitfalls. Xerox is an example that is often quoted in the literature (e.g. [8]). They attempted to embed the know-how of its service and repair technicians into an expert system that was installed in the copiers and expected that technicians responding to a call could be guided by the system and complete repairs from a distance. That’s not what happened. Rather the copier designers discovered that technicians learned from one another by sharing stories about how they had fixed the machines. The expert system could not replicate the nuance and detail that were exchanged in face-to-face conversations.

Nowadays, many such conversations happen in discussion fora or blogs on the Internet. Software engineers, in particular, consult them when they encounter a tricky problem. Many technology firms also offer Q&A sections where users can find answers to problems. Usually such platforms are not as well structured as expert systems, which is why text mining and intelligent search algorithms may be used to help people find what they are looking for and serve to “pre-codify” relevant knowledge.

It is generally recognised that social media as well as the dramatic advance and widespread use of mobile devices, social software and online social networking are having a positive impact on KM [13]. These trends have rekindled the debate about how technology may contribute to an effective sharing of knowledge and experience across units and organisations [14]. Since the open innovation concept actually emphasises the idea of alliances and cooperation between partners across organisational boundaries to create new products and services, it is surprising that the respondents in the survey do not appear to recognise the role that EM might play in innovation.

In a recent article in the Harvard Business Review [5], the authors discuss a key obstacle to innovation, i.e. the absence of any systematic review of lessons a company might learn from mistakes or failed projects. They suggest to rigorously extract value from failure by means of a three-step process:

1. Learn from every failure, e.g. the insights one has gained (e.g. about customers or markets, one’s team, personal growth) as well as the liabilities (e.g. costs in time and money, reputation)
2. Share the lessons across the organisation (e.g. by means of regular reviews for sharing lessons incl. informal approaches such as capturing critical lessons with stories)
3. Review one’s pattern of failure from a bird’s-eye view (e.g. is our organisation learning from unsuccessful endeavours?)

The aim is to nudge people toward greater openness to failure, which will be less painful according to the authors when one manages to extract the maximum return from it. According to the authors this can only be achieved when we learn from mistakes, share those lessons and periodically check that processes such as lessons learned workshops or debriefings help one's organisation move more efficiently in the right direction.

Finally, both the survey and the preliminary results from the follow-up study show that people will not engage in EM if it implies additional effort. Therefore, EM activities have to be integrated into workflow and process management approaches to provide the context in which experience is reused on the one hand, and to provide best practices, i.e. proven procedures for performing certain tasks, on the other hand. This demand is not really new and has been voiced by other researchers who wrote about how best to support knowledge-intensive work (see e.g. [16, 1], but these kinds of approaches have received much less attention in the last ten years.

Similarly, EM activities – especially those related to lessons learned and best practices – should be integrated with project management. As has been pointed out in [10], there is actually a gap in project management practice and suggested that there is a need for more research in understanding the role KM plays in project management methodologies.

In this respect it may be worth mentioning the so-called “Syllk” model, which stands for Systemic Lessons Learned Knowledge model. According to its proponents [6] it could assist in identifying the KM barriers that need to be overcome for an effective transfer of lessons learned. Others such as [9] have demonstrated how the Syllk model can support knowledge sharing and integration between an organisation and its suppliers, customers and partners. As is the case with experience and its transfer, the human factor plays a major role in the studies on as well as applications of the Syllk model because it recognises that for organisations to learn, people and systems (processes and technology) have to be working together closely [17].

6 Conclusions

As we have seen, experience and its management may well be one of the most neglected success factors in companies in the German-speaking corporate world. Although the majority of managers consider experience an important asset, few actually support it in any systematic way. This finding has been corroborated by a series of interviews conducted as a follow-up to the survey.

Company size and position rather than age or gender play a role when it comes to preferences, attitudes or practices with regard to experience and its management. The preference for classical and people-oriented methods rather than more modern IT-supported methods, however, appears to be shared by all. To overcome the current reservations with regard to potentially effective methods for experience exchange, we suggest looking further into how to integrate experience and its management into project and process management practice

as an automatic part that does not require any additional effort. Only then will it be possible to exploit the full potential of EM.

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