What makes employees share or withhold knowledge?

Prof Karin Moser brings together knowledge of computer science and psychology to research what makes employees share or withhold knowledge.

The failure of knowledge management systems

During the late 1990s knowledge management became the latest management hype, spurred along by new developments in IT and a firm belief that intangible assets – the knowledge of employees – could be made productive in a heartbeat. Companies worldwide invested billions into new groupware and database systems to manage knowledge, which then failed miserably.

"Why was this?" asks Prof Karin Moser, Director of Research and Enterprise and Professor of Organisational Behaviour in the Business School. "Because they overlooked the simple but important fact that any technology is only as good as the people who use it, and that these people not only need to be trained on the new systems, but also motivated to use them."

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- Prof Karin Moser
Where psychology and computer science meet

It is areas like this where Prof Moser’s research as a psychologist and computer scientist comes into play. She addresses these gaps and has devised experimental studies that simulate knowledge sharing at work to understand the underlying motivations of individuals to share or withhold their knowledge. She has also conducted surveys and interviews with many companies and stakeholders, and advised both private and public sector organisations in different countries on knowledge management strategies and how to assess and monitor their employees’ knowledge and motivations.

“The reason why managing knowledge is very challenging is that knowledge sharing constitutes a social dilemma. While it is in the collective interest of a company that employees share their knowledge, this is not necessarily in the interest of the individual,” adds Prof Moser.

The barriers to knowledge sharing

“If we look at knowledge as the currency in an exchange relationship between employee and employer, we have two stakeholders with very different cost-benefit matrices. Why? Because knowledge is power and acquiring expertise takes a lot of time and effort, and people don’t want to just give up this advantage. Another reason is that knowledge sharing is what is called ‘extra-role behaviour’ in psychology. Experts don’t just know ‘more’, they are able to contextualise problems differently and can make connections faster and at a higher level of complexity, which leads to better quality decisions and higher creativity in thinking. Much of this is very difficult and sometimes impossible to explicate; it is tacit knowledge and simply what highly skilled and experienced people do rather than what they say.

“Because of the nature of knowledge, employers cannot just order employees to divulge their knowledge and to write it all down. This simply won’t work and tacit knowledge can be easily withheld without breaking an employment contract. Knowledge transfer takes a lot of effort and time, and only works if people are really motivated to share, because it makes sense to them and they stand to gain from it in some way.”

Viewing knowledge sharing as a social dilemma

Prof Moser’s idea to understand knowledge as a common good and knowledge sharing from a social dilemma perspective is new, whereas previously the social dilemma approach had only been applied to physical and monetary resources but not to intangible assets.

“My studies have shown how structural aspects of work organisation impact on knowledge sharing, such as how projects are allocated to departments, how mental
models of knowledge management implicitly guide senior managers’ decisions and leadership behaviour, or how highly skilled experts can be motivated to work in teams even if they could easily outperform most members or even whole teams. This is all critical information that has major impacts on the knowledge management approach of organisations worldwide.”

**Research impacts**

Prof Moser has worked with approximately 20 companies and governmental organisations over recent years. This includes a five-year project with Sulzer Ltd, an international high-tech company that wanted support in improving their knowledge transfer and knowledge development in their research and development intensive engineering and IT departments.

As a result of Prof Moser’s work, Sulzer completely changed their organisational structure to reduce barriers to share knowledge across disciplines, which required changing the entire project management and accounting system of the firm. They put in place new meeting structures, and introduced good practice workshops and micro-reports as a consequence, and new group-based, non-financial rewards for successful R&D projects. They also introduced communities of practice for employees to increase and diversify their knowledge with peers, and allowed up to 10 percent of working time to be used on knowledge-related activities that were not related to customer accounts.

Sulzer also reconsidered the roles in their R&D teams to reduce role conflicts that had had a negative impact on team co-operation and productivity. When the effectiveness of the measures taken was evaluated, there was clear positive impact on satisfaction of employees and on the productivity of the interdisciplinary teams.

Another recent project was with Swiss Olympic, which wanted support in developing a knowledge management strategy that would allow the organisation to include their many stakeholders to promote top athletes and teams. The stakeholders are hugely diverse and include the individual athletes, coaches, sports clubs and their representatives, schools and the families of young, promising athletes, the volunteers working for clubs and schools, the Ministry of Sports, the sports facilities and their owners, and the universities and companies developing and improving the sports materials and mental and physical training methods.

All of these stakeholders have different interests and agendas, but all hold a wealth of knowledge in their respective areas that should be shared across clubs and athletes in the interest of sports promotion. The majority of them, however, are only loosely connected, with little formal obligation to collaborate. Swiss Olympics (as a non-profit organisation) has limited direct power and influence. Prof Moser’s work included a detailed analysis of the cost-benefit matrices for all stakeholders to establish where there was a common ground for knowledge sharing, identifying joint goals and incentives for collaboration and where the major conflicts of interest were.

Based on this analysis and Prof Moser’s recommendations, Swiss Olympic defined a new knowledge management strategy, introduced a new electronic platform for all partners
to share information about new training methods and technological innovations in sports materials, and a new meeting structure for experts to share knowledge and experiences between athletes, coaches and clubs. This also included re-evaluating the roles of, and the relationships with, different types of sports clubs, from the big organisations with lots of money such as successful football clubs, to the small players, such as community-based clubs for less popular sports that depend heavily on volunteers. The analysis highlighted the importance of the nonprofessional stakeholders in sports promotion, such as the club volunteers, and the families of young athletes. The implementation and evaluation of the measures are ongoing.