

Knowledge sharing in online communities: the power game

Isabelle Bourdon, Chris Kimble and Nathalie Tessier

Isabelle Bourdon is a Maître de Conférences en Sciences de Gestion based at Laboratoire du MRM, École Polytechnique Universitaire de Montpellier – Université Montpellier II, Montpellier, France. Chris Kimble is an Associate Professor of Strategy and Technology Management at KEDGE Business School, Marseille, France and Laboratoire du MRM, Université Montpellier II, Montpellier, France. Nathalie Tessier is a Professor of Human Resource Management at ESDES School of Management, Université Catholique de Lyon, Lyon, France.

1. Introduction

The idea of knowledge being “the one sure source of lasting competitive advantage” (Nonaka, 1991, p. 96) has led to knowledge, knowledge management and knowledge sharing becoming a hot topic in both business and academic circles. However, despite this interest, knowledge sharing in organizations is not always straightforward or successful. Various attempts have been made to build information systems to share knowledge; however, notwithstanding advances in information technology, there is a growing recognition that most knowledge remains anchored in individuals (Kimble, 2013). Consequently, knowledge management and knowledge sharing in a business is highly dependent on the behaviour of its employees. For example, DeLong and Fahey (2000) see the creation of a culture that encourages positive attitudes to knowledge sharing as being one of the key success factors behind knowledge management initiatives. Similarly, Argote *et al.* (2003) highlight the “importance of social relations in understanding knowledge creation, retention and transfer” (p. 576).

Communities of practice (CoPs) are used widely for knowledge sharing. However, like knowledge management systems, using a CoP as a means of sharing knowledge is not without its problems (Hildreth and Kimble, 2002). There is considerable ambiguity about exactly what CoPs are, and several authors have examined the way in which the concept of a CoP has changed (Cox, 2005). One of the most frequent criticisms is that the literature on CoPs fails to address the relevance of power to knowledge sharing. For example, Kimble *et al.* (2010) show that knowledge sharing can sometimes be politically motivated, while Swan *et al.* (2002) suggest that CoPs retain certain types of knowledge within the group rather than sharing it with outsiders.

This paper reports on a study of knowledge sharing in what was described a global online CoP. The goal was to gain a better understanding of the nature of such communities and their relationship with the host organization. The community in our study was created specifically to share knowledge between product engineers and marketing managers in a business unit of a large multinational organization. Although the focus of the community was firmly part of the physical world, the community itself exists almost entirely online. Most of its members only met in virtual meetings hosted by the business unit’s HQ in France.

2. Knowledge sharing in CoP: an evolving concept

The notion of a CoP has changed greatly between the more analytical early works (Lave and Wenger, 1991; Brown and Duguid, 1991) and the later, more managerial, accounts (Wenger *et al.*, 2002). The term originated with Lave and Wenger (1991) and was used to refer to small co-located groups where situated learning took place. These groups existed, for the most part, outside of the formal organizational structure. For example, Brown and

Duguid (1991) described them as organizational mavericks, while Gongla and Rizzuto (2004) noted that CoPs sometimes “disappeared” to avoid management scrutiny. However, in his later works (Wenger *et al.*, 2002), Wenger argued that CoPs could be an integral part of a formal business structure. The notion of a CoP made an epistemological *volte face* and moved from something that existed in spite of the efforts of management (Brown and Duguid, 1991) to something that could be cultivated, if not actually created, by management (Wenger *et al.*, 2002). The concept moved still further from its epistemological roots when it was extended to embrace so-called virtual CoPs, where the members of the community never meet each other face-to-face (Dubé *et al.*, 2005).

Partly due to this “stretching” of the CoP concept, power differentials, both within communities and between communities and their host organization, have become a focus of interest; particularly when communities are intentionally “created” or “cultivated”. Contu and Willmott (2003) provide one of the most widely cited critiques of the way in which power within CoPs is dealt with, arguing that, when viewing a CoP as a forum for situated learning, an appreciation of power relations is critical to understanding the way it functions. Similarly, Fox (2000), who was also concerned with situated learning, stressed the role that actor network theory could play in understanding power relationships in CoPs. Here we argue that similar complementarities exist between the French sociology of “analyse stratégique” developed by Crozier and Friedberg (1977) and claim that using this framework offers an alternative approach to understanding how power relationships influence the way a CoP operates.

We will deal with the theory behind this shortly but, for the moment, we will simply highlight some of the similarities, and differences, between this approach and earlier descriptions of the way that CoPs behave in business settings.

Firstly, both are concerned with what happens in the gaps that exist in the formal structure of organizations. For Brown and Duguid (1991), there is a gap between the way an organization specifies that a person’s work should be done and the way in which that person’s work is actually done. Similarly, for Crozier and Friedberg (1977), the modern business organization is one where almost every aspect of behaviour has been codified and planned in advance, leaving little room for individual discretion. In each case, those opportunities that do exist for individuals to exercise freedom of choice become a key political resource.

Secondly, despite the recognition that exogenous rules and regulations exist, both approaches acknowledge the socially constructed nature of the organization. For Brown and Duguid, the reality of the organization is not found in the formal procedures of the organization, but in the relationships between the groups that constitute it. Similarly, Crozier and Friedberg argue that the way an organization works is the outcome of a strategic game to control what they term “zones of uncertainty”, spaces where the rules of the organization do not clearly specify an outcome. In both cases, organizational structures are created through the actions of actors who simultaneously construct their own reality and act within it.

Perhaps the key difference between the two lies with the way in which the collective is viewed. CoPs, particularly in the early works of Lave and Wenger and Brown and Duguid, are seen as groups, which, although there may be internal disagreements, act broadly based on consent. Although it disappeared in Wenger’s later works, the notion of legitimate peripheral participation encapsulated the idea of a group of people who had a collective worldview based on an acceptance of the legitimacy of old timers in the community. However, as indicated in the subtitle of their book – “The constraints of collective action” – Crozier and Friedberg take a rather different view. For them, there is no notion of community, at best there is a group solidarity enforced by the fear of exclusion. In this world, it is conflict rather than consent that characterizes collective action, and it is the strategies created by the players that place a limit on their ability to act collectively.

3. Understanding power games

It appears that Crozier and Friedberg's notion of "analyse stratégique" could be a useful method to examine the power relationships within a CoP and its relationship with its host organization. This is not an altogether novel idea. For example, Ducheneaut (2002) used their ideas to study a situation not that far removed from our case study: the use of e-mail as a medium for communication within an organization.

The model developed by Crozier and Friedberg revolves around the analysis of relationships between interdependent actors rather than groups *per se*. Their work is based on four fundamental concepts (Figure 1):

- The concept of actors who act in their own interests and interact with other actors.
- The concept of a concrete system, which is formed by the interactions with other actors.
- The concept of a strategic game where actors seek to exploit "zones of uncertainty".
- The concept of power itself, which is viewed as a set of relations between actors.

3.1 Actor

The definition of an actor is flexible: an actor is a social entity in the sense it enters into relationships with other actors and has objectives, which may or may not be different from the objectives of the organization. Thus, in this sense, a CoP could constitute the actor. An actor always has freedom of choice, even if this choice is passivity, i.e. to do nothing.

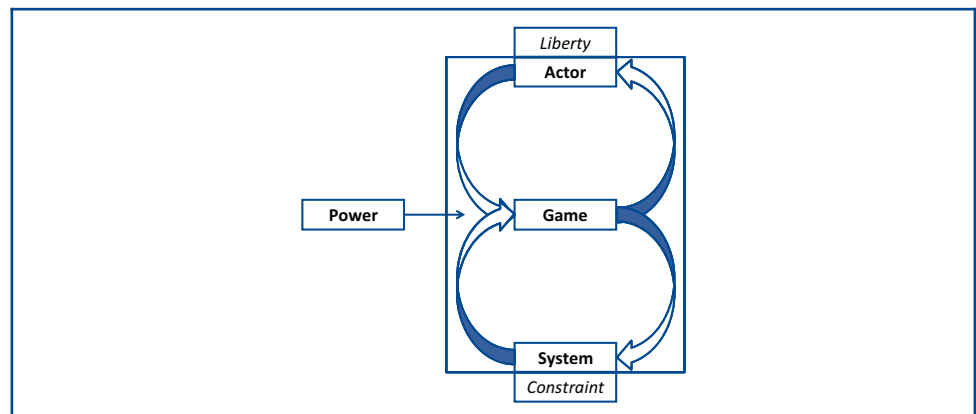
3.2 System

An organization is seen as a set of relationships or "systèmes d'action concret" (concrete action systems) which are created by the players themselves. Within these, actors negotiate, exchange, make decisions and bargain. Such systems are usually a compromise between the formal objectives of the organization and those of the actors themselves.

3.3 Game

The strategic game is the method used to regulate these systems. The game is about both freedom and constraint. The actor has to accept the rules of the game and, at the same time, develop a strategy to achieve their own objectives. The organizational forms that result from this are a series of interconnected games. Ducheneaut (2002), for example, noted that actors, technology and context were not distinct entities, but elements that constantly interacted with each other within the boundaries of the game.

Figure 1 Crozier and Friedberg's model



3.4 Power

Power is defined as the ability of an actor to implement their strategies. In any given situation, actors will act in such a way as to maximize their own power. The degree of discretion an individual has is normally prescribed by formal rules and regulations; however, there are some situations where this is not the case. These situations create what they call a “zone d’incertitude” (zone of uncertainty).

A zone of uncertainty is a situation that is not covered by formal organizational rules where an actor is free to increase their own power or to limit the discretion of others. Consequently, zones of uncertainty become the focus of strategic power games where the goal is to either enlarge or preserve existing power relations by limiting the freedom of others to encroach upon them. These games are often played in situations where there are scarce resources, a lack of clear objectives or instability in the environment.

4. The case study

The case study is of what is described as an online CoP, hosted by a French-based business unit of a large multinational engineering company. Our goal was to gain a better understanding of the nature of the group, the relationships within it and the relationship between it and the host organization.

The company has been in existence for more than 150 years, is present in over 130 countries and contains many online communities. The case study community was created in 2006 with the goal of improving the sharing of knowledge between the technical and commercial functions of the organization for a specific range of products produced by the business unit. Examples of the sort of knowledge that was shared within the community include technical requirements for local markets, strengths and weaknesses of competitors’ products and solutions to particular problems.

The community is large, growing and international. In 2008, there were 370 members in 62 countries. The membership is mainly product engineers, design engineers, marketing and sales executives; although, a number of technical support staff are also members. The members mostly come from Europe (51 per cent) and North America (23 per cent); Asia with Oceania accounting for only 16 per cent. Web-based meetings are scheduled around the time zones of the participants. Each meeting consists of presentations on subjects such as best practices, market conditions, the activities of competitors and what are called “tricks”; the latter often taking the form of a success story.

The community has a degree of official recognition and a reasonably formal structure. It has a steering committee consisting of eight core members and a points-based system that is used to measure a member’s participation. Points are awarded when a member undertakes one of eight predefined actions. Every six months, the eight most active members are designated “Core Members”; the accounts of members who have not participated at all are suspended. Suspended accounts can be reinstated on request, but if the member continues not to participate, the account is removed after a further six months. The points do not play any formal role in remuneration or promotion.

The approach to our study is broadly inductive and is an exploratory case study (Yin, 1994). Our main data collection instrument was semi-structured interviews by telephone augmented with additional data from documentation supplied by the company. In addition, we had the opportunity to observe two meetings: one physically from the control room at the HQ in France and one virtually as an online participant. The data produced by the interviews were recorded, transcribed and analysed to identify common themes. For the analysis and interpretation of the data, we chose the thematic content analysis, which is based on a system of extracting themes and sub-themes. A summary of these results is given below.

4.1 Reasons given for participating in the community

Two main reasons for participating in the community were identified in our work.

Firstly, there were individuals who appeared to have an instinctive moral reflex to contribute to the community because it was “the right thing to do” (Wasko and Faraj, 2000). We termed these “sharers”: people who had integrated the community into their everyday work. Sharers often devoted a lot of time to the community, even if it involved participation outside of their normal working hours.

Secondly, there were individuals who appeared to have a specific interest in using the community, such as finding a particular item of information. We termed these “searchers”. Some examples of searchers were:

- Those who took a functional view of the community as a “market” for knowledge. These users were regular visitors who both received information from the community and gave information back in exchange.
- Those who view the community as simply a way to find information they needed. Such users tended to spend little time in the community and, although they received information, did not give back much in return.
- Those who wished to find a benchmark for their own work and to learn from the experiences of others. The amount of time such users spent in the community varied according to their interests.

4.2 Relationships within the community and between the community and the host company

4.2.1 The community as a strategic game. One area where Crozier and Friedberg's model helped us to understand what was happening in the community was in the relationship between Europe, and more specifically France where the company's HQ was based, and other parts of the world. For one respondent, the company's culture was all about knowledge sharing and entrepreneurship; however, another felt that nothing could be done locally and that all decisions were made in France. When we asked respondents to tell us about the conflicts in the community: most answered that there were no conflicts or problems. However, later, several respondents moderated their opinions and indicated that there could sometimes be tension between France and other countries.

The community is animated from France and there is a perception among some that Europe is favoured because of this. From this viewpoint, we could argue that people who are in France benefit from more resources and information than members in other areas, and so have more power. Thus, the stakes of the game in the European area and the rest of world area might be different. If this were the case then people would implement strategies (such as passivity, compromise or alliance) to deal with this situation. For example, when a group had information that would allow it to improve or maintain its power, it would not share it.

A similar situation appeared to exist between the different types of actors that emerged in the community: “sharers” and “searchers”. In our analysis, these two groups could be seen as actors with different sets of objectives who bargain, exchange and negotiate to achieve their objectives.

4.2.2 The community as a way to gain resources. All of the individuals in our sample agreed that they gained something from participating in the community: benchmarking, knowledge or simply finding a specific item of interest. For almost all of the members, the principal focus of interest was the product they produced and sold. However, some also mentioned that the community provided them with the opportunity to get to know other people in the company.

For some this might simply be a response to a personal need to build social relationships; however, from our perspective, this could also be interpreted as an attempt to gain access

to more resources. For example, one core member explained how membership of the community could serve the interest of his local team and boost its performance. The community gave information about what might happen in the future, and so gave him an advantage over others.

4.2.3 The limits of the game. As indicated in Section 4.2.2, motivations for membership of the community differed; some used the community as a route to recognition from local peers, while others used it to gain recognition from members in other countries. However, although the community put members in direct contact with people in France, which might have strategic implications (see Section 4.2.1), most respondents felt that membership of the community only gave them influence over things that happened inside the community; it did not influence their career growth nor did it exert any influence on their line management. It appears that, in our terms, the strategic games that were associated with this particular community were largely limited to what happened within the community itself.

5. Conclusions

The principal conclusion that can be drawn from our work is that this type of community is not as clear-cut as might be expected. It is possible to find evidence of people motivated by a concern about a practice that was also part of their working lives (Lave and Wenger, 1991); similarly, there is evidence of people who viewed the community in a more instrumental way (Wenger *et al.*, 2002). There is evidence of groups existing within a larger network (Brown and Duguid, 2000), and there is also evidence of people using the group as an “external memory” (Lindkvist, 2005). Perhaps the first lesson that can be learnt from our work is that so-called virtual CoPs are not as easy to categorize as it sometimes appears, and that attempting to apply a “one size fits all” solution to the management of such communities risks oversimplifying a complex situation.

Another point of interest was the use of Crozier and Friedberg’s “analyse stratégique” framework. This helped to highlight certain aspects of community life, such as the potential for playing strategic games, which other approaches might have missed. The term community often carries with it notions of consensus, shared objectives and a friendly and unthreatening environment. Clearly, this is not always the case. The second lesson that we offer from this study is not to overlook the potential for conflict and power games that can lie below the surface of what appears to be an otherwise tranquil and untroubled community.

References

- Argote, L., McEvily, B. and Reagans, R. (2003), “Managing knowledge in organizations: an integrative framework and review of emerging themes”, *Management Science*, Vol. 49 No. 4, pp. 571-582.
- Brown, J.S. and Duguid, P. (1991), “Organizational learning and communities of practice: toward a unified view of working, learning, and innovation”, *Organization Science*, Vol. 2 No. 1, pp. 40-57.
- Brown, J.S. and Duguid, P. (2000), *The Social Life of Information*, Harvard Business School Press, Boston, MA.
- Contu, A. and Willmott, H. (2003), “Re-embedding situatedness: the importance of power relations in learning theory”, *Organization Science*, Vol. 14 No. 3, pp. 283-296.
- Cox, A. (2005), “What are communities of practice? A comparative review of four seminal works”, *Journal of Information Science*, Vol. 31 No. 6, pp. 527-540.
- Crozier, M. and Friedberg, E. (1977), *L'acteur et le Système Les Contraintes de l'action Collective*, Éditions du Seuil, Paris.
- DeLong, D.W. and Fahey, L. (2000), “Diagnosing cultural barriers to knowledge management”, *Academy of Management Executive*, Vol. 14 No. 4, pp. 113-127.
- Dubé, L., Bourhis, A. and Jacob, R. (2005), “The impact of structuring characteristics on the launching of virtual communities of practice”, *Journal of Organizational Change Management*, Vol. 18 No. 2, pp. 145-166.

Keywords:

Knowledge management,
Knowledge sharing,
Online communities,
Communities of practice,
Multinational organizations,
Power relationships

- Ducheneaut, N.B. (2002), "The social impacts of electronic mail in organizations: a case study of electronic power games using communication genres", *Information, Communication & Society*, Vol. 5 No. 2, pp. 153-188.
- Fox, S. (2000), "Communities of practice, foucault and actor-network theory", *Journal of Management Studies*, Vol. 37 No. 6, pp. 853-867.
- Gongla, P. and Rizzuto, C.R. (2004), "Where did that community go? Communities of practice that 'disappear'", in Hildreth, P. and Kimble, C. (Eds), *Knowledge Networks: Innovation through Communities of Practice*, Idea Group Publishing, Hershey, PA; London, pp. 295-307.
- Hildreth, P.M. and Kimble, C. (2002), "The duality of knowledge", *Information Research*, Vol. 8 No. 1, available at: <http://informationr.net/ir/8-1/paper142.html> (accessed 12 October 2012).
- Kimble, C. (2013), "Knowledge management, codification and tacit knowledge", *Information Research*, Vol. 18 No. 2, available at: <http://informationr.net/ir/18-2/paper577.html> (accessed 19 June 2013).
- Kimble, C., Grenier, C. and Goglio-Primard, K. (2010), "Innovation and knowledge sharing across professional boundaries: political interplay between boundary objects and brokers", *International Journal of Information Management*, Vol. 30 No. 5, pp. 437-444.
- Lave, J. and Wenger, E. (1991), *Situated Learning: Legitimate Peripheral Participation*, Cambridge University Press, Cambridge.
- Lindkvist, L. (2005), "Knowledge communities and knowledge collectivities: a typology of knowledge work in groups", *Journal of Management Studies*, Vol. 42 No. 6, pp. 1189-1210.
- Nonaka, I. (1991), "The knowledge-creating company", *Harvard Business Review*, Vol. 69 No. 6, pp. 96-104.
- Swan, J., Scarbrough, H. and Robertson, M. (2002), "The construction of 'communities of practice' in the management of innovation", *Management Learning*, Vol. 33 No. 4, pp. 477-496.
- Wasko, M.M. and Faraj, S. (2000), "It is what one does: why people participate and help others in electronic communities of practice", *The Journal of Strategic Information Systems*, Vol. 9 Nos 2/3, pp. 155-173.
- Wenger, E., McDermott, R.A. and Snyder, W.M. (2002), *Cultivating Communities of Practice: A Guide to Managing Knowledge*, Harvard Business School Press, Boston, MA.
- Yin, R.K. (1994), *Case Study Research, Design and Methods*, Sage Publications, Newbury Park, CA.

About the authors

Isabelle Bourdon is a Maître de Conference at the Department of Informatics and Management at Université Montpellier II. She is a member of the MRM Laboratory; has undertaken research in knowledge management, information systems and innovation; and has published work in *International Journal of Knowledge Management*, *Système d'Information et Management* and *Revue des Sciences de Gestion*. Isabelle Bourdon is the corresponding author and can be contacted at: isabelle.bourdon@polytech.univ-montp2.fr

Chris Kimble is an Associate Professor of Strategy and Technology Management at Kedge Business School Marseille and is affiliated to the MRM Laboratory at Université Montpellier II. Before moving to France, he lectured in the United Kingdom on information systems and management at the University of York and on information technology at the University of Newcastle and was a researcher with both the Business School and the Department of Informatics at the University of Northumbria. His broad fields of research are business strategy and the management of the fit between the digital and social worlds.

Nathalie Tessier is a Professor and Researcher in Human Resources Management at ESDES School of Management at Université Catholique de Lyon. She has undertaken research in human resources and management field and has a particular interest in knowledge management, micro-firms and social responsibility. She has published work in both professional and academic reviews such as *Revue Management et Avenir* and *Revue des Sciences de Gestion*.

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgroupublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.