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Abstract
In this article, we explore the experiences of a medium sized media relations firm based in Beijing, Shanghai, Guangzhou and Chengdu as it sought to establish a knowledge sharing culture. Building off existing initiatives involving online communication, as well as an espoused enthusiasm for sharing knowledge, we describe how we have started working with this firm as it seeks to develop a key knowledge sharing competence.

Keywords: Knowledge Sharing, China

Introduction

The effective management of knowledge resources has become an increasingly important organisational imperative (Tanriverdi, 2005). The literature is full of articles describing, analysing and assessing a variety of knowledge management (KM) related issues. The codification of explicit knowledge has been identified as a new source of organisational strategic and competitive advantage. However, much of this literature is based on the experiences of organisations in Western nations, where the IT-enabled codification, distribution and reuse of knowledge is a primary topic for consideration (Cohen, 1998). Our awareness of how organisations in other countries manage knowledge is rather limited, not least in China where, despite some early work (Burrows et al., 2005; Voelpel and Han, 2005; Chow et al., 2000; Lu et al., 2005), there is much still to learn, notably about the role of IT in enabling the effective and efficient sharing and leveraging of tacit, context-based knowledge. Nevertheless, there is a widespread recognition that Chinese firms trail their Western counterparts in (formally) implementing KM initiatives.

In this article, we explore the deployment of IT for knowledge sharing (KS) in Epsilon Associates, a medium sized media relations firm operating in Beijing, Shanghai, Guangzhou and Chengdu. The article is structured as follows. Following this introduction, the literature review concisely outlines previous research on KM and KS in the Chinese context. We briefly introduce our research method - Canonical Action Research (CAR). We then use CAR as a frame to describe the ongoing progress of the study. Next we discuss the relevant issues associated with KM in the Chinese context, bearing in mind our emerging findings in Epsilon. Finally we conclude the article with an exposition of the strengths and weaknesses of the research, as well as future directions.

Literature Review

Knowledge sharing is often considered to be a crucial activity for organisations because it enables them to identify, promote and spread best practices while reducing or eliminating redundant reinvention efforts (McDermott and O'Dell, 2001). Since KS propensity is influenced by cultural factors, many China-related articles involve comparisons with other countries (e.g. Burrows et al., 2005; Chow et al., 2000) and the transfer of knowledge to China (e.g. Li and Scullion, 2006). Such studies are usually informed by Western theories

and assumptions, adopting what Tsui (2006) describes as an etic perspective, looking into China from the outside, instead of studying China from the inside (an emic perspective).

Key determinants of actual KS practice include societal and organisational culture (cf. Hofstede, 2001; Chinese Culture Connection, 1987), rewards/incentives and the availability of technology-based support tools, or knowledge management systems (KMS) that facilitate knowledge sharing. In China, it is important to distinguish between the in-group and the out-group. The in-group comprises the colleagues with whom one interacts regularly; the out-group includes a wider group of people, some of whom may be competitors. In China, the willingness of employees to sacrifice their own interests for their collective in-group (Chow et al., 2000) means that knowledge sharing is more likely to occur within the in-group than the out-group.

Considering the Chinese societal culture in more detail, the individualism-collectivism, power distance and long term orientation dimensions (Hofstede, 2001), and the need for Chinese people to develop and maintain their sense of face, as individuals and in-group members (Ho, 1976; Chow et al., 2000), have all been found to be important in knowledge sharing. Furthermore, the Chinese preference for informal and implicit communication (Martinsons and Westwood, 1997), "transferring knowledge through interpersonal contact, rather than through formal and/or written means" (Burrows et al., 2005) should not be underestimated. As Lu et al. (2005) remark, "positive interpersonal relationships are conducive to … knowledge sharing". The importance of interpersonal trust "as a critical social resource that facilitates cooperation and coordinated social interactions" (McAllister, 1995) suggests that it will also facilitate knowledge sharing, as also does co-worker collegiality. Nevertheless, these interpersonal contacts tend to be among peers or top-down: few Chinese managers are willing to accept knowledge from their subordinates (Hong and Engestrom, 2004).

Given the strong Chinese preference for interpersonal relationships, codified explicit knowledge is relatively unusual in the Chinese context (Burrows et al., 2005), but the tacit knowledge that typically is shared by the Chinese is not readily codifiable. In the main, however, information sharing is not prevalent in China. While IT-enabled sharing of explicit knowledge is commonplace, sharing of tacit knowledge is not so simple. Thus, while IT applications are seeing increasingly widespread use in China, there is little evidence that they are used to support knowledge sharing. In consequence, it is suggested that interpersonal socialisation rather than IT will determine the success of tacit knowledge sharing inititatives: "In the digital era, there is still no perfect substitute for the motivational effects of human bonding and social connectedness" (Lu et al., 2005, p.33).

In developing a knowledge sharing culture, rewards and motivations that can stimulate a willingness to share knowledge are often considered important. Bock and Kim (2002) suggest that knowledge sharing should be rewarded, while knowledge hoarding should be penalised. Huang et al. (2006) also identify the need for management to encourage knowledge sharing explicitly.Voelpel and Han (2005) highlight the realisation that high quality content identified through a KMS can save employees' considerable amounts of time and effort in order to solve problems. Collectively, these measures add up to the development of a knowledge sharing culture with "systematic efforts to recruit, select and socialize" employees (Burrows et al., 2005).

Research Methods

Canonical Action Research (CAR) is a research method that involves solving organisational problems through intervention while at the same time contributing to both research and practical knowledge. The use of the word canonical refers to the "iterative, rigorous and collaborative process-oriented model developed by Susman and Evered (1978) that has been

widely adopted in the social sciences and hence which has gained 'canonical' status" (Davison et al., 2004). Action researchers, iterating through carefully planned and executed cycles of activities, improve their understanding of a problem and simultaneously advance towards an appropriate solution. They aim to ensure that their interventions are both realistic and relevant, while appropriate standards of rigor are maintained, with the deployment of methods and analytical techniques as appropriate to the organisational context.

As a guide to good CAR, Davison et al. (2004) developed a set of five principles and thirty one associated criteria, which cumulatively help to ensure both that researchers understand how to conduct theory-driven CAR, and that readers know both what to expect in a CAR paper, and how to interpret CAR papers. Following a cycle of five activities, both researcher and client engage in an evaluation of a project's progress and determine whether a solution has been reached, or whether further cycles are required. The CAR reported here follows the recommendations of Davison et al. (2004), with the explicit caveat that the research is still in progress at the time of writing: only one cycle has been completed to date.

Research Context and Project Processes

In this section, we use the CAR framework to introduce the research, as it is emerging (see Table 1).

Cycle 1	
Diagnosis & Planning Nov. 3rd, 2006	Initial presentation to Epsilon's General Manager (GM) in Beijing. Discussion about Epsilon's business nature and environment, competitive pressures, communication issues, knowledge sharing, etc. Preliminary identification of different activities that can be undertaken to ameliorate Epsilon's knowledge sharing activities. The researchers suggested that they should talk to all of Epsilon's employees on a one-to-one basis.
Intervention I Nov 3rd, 2006	As soon as the entry/diagnostic activities had been completed, the first author (FA) and a senior research assistant (SRA) started to talk to Epsilon's employees, using a semi-structured interview approach. On this date, we spoke with 4 employees. We introduced the concepts of knowledge and knowledge sharing, seeking to identify employee attitudes towards the concepts, current practices within Epsilon, as well as any barriers to effective knowledge sharing. The conversations also reached out into related domains, such as the current use of various online tools, sharing between offices and teams, executive support and incentives for sharing, etc. The same conversation pattern was later used in all other interventions at this stage of the research. All conversations were recorded on an MP3 player (with permission from each individual) for later transcription. Most interviews were conducted in Chinese, with English used to a lesser extent.
Intervention Ia November 27th-29th, 2006	The SRA revisited Epsilon's Beijing offices to undertake knowledge sharing conversations with an additional 22 employees.
Intervention Ib December 8th, 2006	The FA and SRA visited Epsilon's Guangzhou offices, talking to all four employees there.
Intervention Ic December 14th, 2006	The FA and the second author (SA) visited Epsilon's Beijing office to talk to the remaining four employees.
Intervention Id	The FA, SA and SRA visited Epsilon's Shanghai offices. The SRA talked

December 19th-21st, 2006	to 30 employees there.
Intervention Ie January 9th, 2007	The SRA conducted a telephone conversation with the two employees in Epsilon's Chengdu offices.
Evaluation December 19th 2006 - January 9th, 2007	Following each of the conversations described above, the SRA translated (where necessary) and transcribed the conversation recordings. The average conversation length was 25.36, with a minimum of 13.08 minutes and a maximum of 50.22 minutes. The FA read through all the interview transcripts to evaluate the overall perspective of employees towards knowledge sharing.
Reflection January 10th, 2007	An eight-page report (4283 words) was prepared for Epsilon's GM. The report contained both evaluative and reflective elements, i.e. evaluating what had been learned through the first cycle of activities, and reflecting on what actions should be taken next. The report was richly illustrated with direct quotations from the interview transcripts. The report was organised in five sections: Introduction, Knowledge Sharing Attitudes, Current Knowledge Sharing Practices, Problems Associated with Knowledge Sharing, and Actions to Take to Promote Knowledge Sharing.
Jan 14th, 2007 **Decision**	Epsilon's GM thanked the research team, writing "Thank you for a very clear and persuasive analysis and recommendations. It feels as if you have caught the essence of both our company culture and the present frustrations over systems for knowledge-sharing. I would be very interested in pursuing your recommendations to the next stage."
Cycle 2	
Diagnosis March 2nd, 2007	The FA and SA met with Epsilon's GM in Beijing to discuss the report and explore how to proceed.

Research in Progress @ Epsilon

A number of key findings have emerged to date from the first CAR cycle. We organise these findings under three sub-headings: knowledge sharing attitudes; knowledge sharing practices; and knowledge sharing problems. We illustrate our findings with interview data.

Knowledge Sharing Attitudes

Attitudes at Epsilon towards KS are overwhelmingly positive. Everyone with whom we spoke recognised the importance of sharing, rather than hoarding, knowledge. Most Epsilon employees have already developed a KS habit: people share because they like to do so and because they recognise the benefits that come to everyone, as well as Epsilon itself. However, some indicate a preference to share only with those with whom they have a close relationship.

> "Sharing is a kind of culture and habit in our company".
> "Sharing means ensuring that the resources are available for the whole company".
> "My willingness to take the initiative to share with others depends on the personal relationship. If we have good relationship, I will tell my experience and comments".

Knowledge Sharing Practices

Knowledge is currently shared in both face-to-face and technology mediated ways, using tools such as email, MSN and QQ, teleconferences, telephone and IP calls. There is also a corporate intranet, where documents can be uploaded and so shared. These various KS activities generally occur inside offices and between team members, not with people in

remote locations. When an individual has a problem and needs someone else to share knowledge with him/her, the tendency is not to search on the corporate intranet, but instead to rely on existing relationships. Indeed, some teams maintain their own media databases, bypassing the corporate intranet altogether:

> "Our client team has set up a small media 'database'. We have three people in this client team and I am responsible for updates. When we finish each event, we will fill in some information. … I know there is a company media database, but I seldom use that".

> "I think there is a lack of cross-team communication. … Even though we are in the same auto team, the inter-office communication is still not enough".

Knowledge Sharing Problems

The lack of time is often cited as a barrier to KS, but most employees indicated that they are self-motivated to share, though some recognition would be appreciated:

> "The problem is we do not have much time to do networking even within the company, because the nature of the PR professional is very tough and fast-moving. Especially in China, we've got too many opportunities and too many businesses we need to identify".

> "Some psychological incentive would work, e.g. let people feel that they gain their face in the office or set up a positive image for themselves [for example] give a chance for people to do a presentation to introduce their idea".

The lack of any search or index capacity in the corporate intranet that could be used to locate specific knowledge items seems to reduce the effectiveness of this potentially valuable tool, and leads to employees relying on 'oral' search methods:

> "[A media list] could be in the server but nobody can find it".
> "Actually, we share everybody's profile somewhere in the server. But the file is too general and too brief. You can not tell what is the specific PR experience that that person has".
> "When you do the search, it cannot show you the full info. You have to click each of the items to see the details".

The lack of a unified platform for knowledge sharing was also a focus of attention, since it is perceived that a lot of resources are wasted or lost:

> "As a PR company, Epsilon needs to establish a media sharing platform. But it hasn't been done 'till now and I can not foresee when it can be available. Therefore, we waste lots of resources".

Discussion & Conclusions

We note a general preference for both oral communication within offices as well as chat-tool mediated communication across offices and with clients. This aspect of the knowledge sharing culture is already well developed and should be encouraged. We believe that given the current use of MSN chat tools, as well as the preference for verbal and quasi-verbal communication, it would be reasonable to implement a web-based conversational knowledge

sharing system (WCKSS). Such a facility would not replace the MSN chat facilities, but supplement them. It would enable Epsilon to manage the created knowledge more centrally, and, critically, enable people to find knowledge items rather more easily. It would be accessible to all employees – all knowledge shared there would be accessible by all employees, no matter where they are located, so long as they have an Internet connection. It could incorporate an e-library, linked to the current server-based document reporting system, enabling download of those reports. It could include not only chat facilities, but also threaded discussions, offering more systematically organised information, as well as contact lists.

The success of such a WCKSS would naturally depend on the extent to which it is used, useful and accessible. At least initially, it will be critical for Epsilon as a whole, as well as team leaders specifically, to encourage, but not mandate, its use. Use, in this case, refers both to uploading content, as well as to searching for knowledge. One way of kick-starting the initiative would be to identify a knowledge team (spread around Epsilon's operating locations) who have the specific task of ensuring that there is valid and useful content available (both historical and current), and of directing employees to the system and encouraging its use. This team would need to work closely with functional team leaders. However, the limited resources and absence of organisational slack (cf. Nohria and Gulati, 1996) that are characteristic of SMEs, mean that a KM solution must be self-sustaining. Without a critical mass of employees, and a corresponding critical mass of content, a knowledge sharing initiative is unlikely to be sustained much beyond an initial honeymoon period. People have to believe in this kind of KS: they need to (be willing to) develop a knowledge sharing culture. As one employee said:

> "I am thinking maybe we can write down our experience and put it on the intranet and make it a habit. In this way, a culture can be formed. I think everybody has some free time during work. If there is such a platform, they will go and have a look. I would like to write down my experience and read others'".

Epsilon's employees have universally indicated their willingness in principle to share knowledge. A WCKSS clearly has the potential to encourage informal knowledge sharing. Nevertheless, there is still some doubt as to whether employees actually will share knowledge beyond their in-groups, and to what extent technology-supported platforms can replace or supplement face-to-face interactions in the Chinese culture.

Knowledge management will take on different forms in different contexts. The objectification and codification of knowledge that is prescribed in many books and commonly attempted in the American corporate world (cf. Falk, 2003) is not universally transferable. Our emic experiences in China indicate a preference for a less formal, more tacit form of knowledge sharing via conversations. Notwithstanding this preference, will a WCKSS really make a difference in Epsilon, particularly for inter-group communications? The preliminary interview evidence is positive, but it clearly demands further investigation. We aim to answer this question more fully by the time this research project is complete.

Previous researchers (Lu et al., 2005) have already noted the strong psychological need for interpersonal social bonding. We further acknowledge the difficulties associated with codifying and sharing the tacit knowledge that is most common in the Chinese context. Following Tsui (2006), we call for more emic research into the practice of KM in China. Our study provides preliminary and tentative support for the IT-based implementation of knowledge sharing initiatives in Chinese firms, but close attention must be paid to such critical issues as the alignment of KM initiatives with core business competences, the psychosocial needs of employees, and the associated allocation of resources to ensure that a critical mass of knowledge items, contributors and users can be sustained.

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