The impact of national cultures on structured knowledge transfer

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Abstract

Purpose – The purpose of this paper is to explore the impact of national culture on the structured knowledge transfer from a US-based (onshore) technical support center to an offshore support center in China.

Design/methodology/approach – The research was conducted as an interpretive case study. Three techniques (i.e. document review, participant observation, and semi-structured interviews) were employed for data collection in the field.

Findings – The findings identify that knowledge tacitness, knowledge gaps, cultural and communication difficulties and weak relationships were the critical barriers to successful knowledge transfer in a cross-cultural knowledge transfer context. It was found that, when a provider and a recipient are located in different individualism/collectivism, power distance, and uncertainty avoidance cultural dimensions, there will be a reduced likelihood of successful knowledge transfer in a structured knowledge transfer process. However, peer-to-peer help, close relationships and proactive learning may assist in decreasing the knowledge transfer difficulties.

Research limitations/implications – The research was limited to one organization in one industry (the IT support industry) and in one country (China). There could be both industry-specific issues and national cultural issues that may affect the findings and conclusions. However, the paper has important practical implications for organizations that are trying to carry out transfer of organizational knowledge or to acquire organizational knowledge in a cross-cultural business context.

Originality/value – The findings provide insight into the cultural issues implicated in the structured knowledge transfer process, when a knowledge provider and a recipient are from different cultural dimensions, as well as offering more general insight into the mechanism of knowledge transfer in the cross-cultural business context.

Keywords Knowledge management, Cross-cultural management, Outsourcing, China

Paper type Research paper

Introduction

Offshore outsourcing has grown dramatically in recent years:

According to Forrester Research, at least 3.3 million white-collar jobs and 136 billion dollars worth of salaries will leave the USA and go to other low-cost labor countries by 2015. 14% of these 3.3 million will be related to IS work (Palvia, 2003).

Datamonitor Research found that the number of contact center agents based in the Asia-Pacific region will continue to grow throughout the following five years (Datamonitor, 2006). The main purposes of offshore outsourcing are to lower operating costs, improve service quality, and facilitate access to expertise (Stratman, 2008). However, outsourcing is not always successful. Gartner, Inc. (2005) predicted that through to 2007, 80 percent of organizations that outsource customer service and support centers with the primary goal of reducing cost will fail. Carmel and Beulen (2005) argued that unsuccessful knowledge transfer is one of the principal reasons for failures in the first few years of offshore
outsourcing, which in turn may be because the prolonged process of knowledge transfer is not well managed.

While knowledge transfer may be difficult between parts of an organization that share a common cultural context, transferring knowledge between offices of an organization located in different countries and diverse cultural contexts may be even more challenging. Argote et al. (2003) argue that even if knowledge is transferred successfully to offshore offices, knowledge users may face issues – for example, knowledge localization. Knowledge is embedded in individuals, in the organization's rules, routines, structures and technologies, and knowledge may be embedded within its original context. It is not possible to replicate the original context to transfer knowledge (Lucas, 2006). Due to the fact that knowledge is created locally, where tasks are attended to, problems defined, and resolved, knowledge might not easily be developed in a similar way when an offshore service context is used to replace a domestic context. Understanding knowledge origins and processes may help to ascertain what challenges exist, where they exist, and how the social and cultural context may influence transfer efforts.

This article reports on the knowledge transfer process observed at an offshore technical support center in China, and examines how national culture impact on structured knowledge transfer from the US-based organization to the offshore support center in a cross-cultural business context.

**Literature review**

A review of the academic literature relating to knowledge transfer reveals that national culture plays a critical role in the knowledge transfer process within cross-culture business contexts. The literature presented in this section is organized into the two areas of knowledge transfer processes and the role of culture in knowledge transfer.

**Knowledge transfer processes**

Alavi and Leidner (2001) define knowledge as “information possessed in the mind of individuals: it is personalized information (which may or may not be new, unique, useful, or accurate) related to facts, procedures, concepts, interpretations, ideas, observations and judgments” (p. 109). According to Nonaka et al. (2000), knowledge is “a dynamic process of justifying personal belief towards the truth” (p. 7).

Nonaka and Takeuchi (1995) assert that there were two kinds of knowledge:

1. explicit knowledge; and
2. tacit knowledge.

Explicit knowledge can be articulated in words and numbers and can be shared in the form of data, scientific formulae and specifications. This kind of knowledge can be codified, transferred easily and free of context. In contrast, tacit knowledge is highly personal and therefore difficult to formalize and to share with others. Tacit knowledge is accumulated practical skills or experiences that allow one to do something efficiently. It is deeply rooted in individuals' cognitive processes and/or ingrained in the routine and non-routine processes of an organization's unique culture and values (Daft and Lengel, 1986). Tacit knowledge transfer generally requires extensive personal contact and socialization (Davenport and Prusak, 2000). Tacit knowledge transfer is based on the depth of social relationship and trust between the parties. Many researchers (e.g. D’Eredita and Barreto, 2006; Tsoukas, 2003) suggest that tacit knowledge cannot be explicated but transfer is possible through socialization.

Knowledge transfer processes can be divided into two groups, namely structured and unstructured knowledge transfer. Structured knowledge transfer is a formal and planned process while unstructured knowledge transfer is an informal and unplanned process. In this paper we focus primarily on the structured knowledge transfer process.
Traditionally, knowledge transfer has been considered a very structured transfer process. For example, Szulanski (1996) introduces a view of best-practice knowledge transfer processes inside the firm, and suggests that there are four phases in the process:

1. initiation;
2. implementation;
3. ramp-up; and
4. integration.

*Initiation (search).* The first stage, initiation, starts with identifying the problem and the knowledge required to solve it. The discovery of the required knowledge may include a search for potential solutions, a search that leads to the discovery of superior knowledge. Once the knowledge required to solve the problem is found, the process flows through to the second stage of implementation.

*Implementation (learning).* This stage, implementation, is where the source and recipients plan and carry out all activities that are necessary for knowledge transfer to take place.

*Ramp-up (practice).* The third stage, ramp-up, is where the recipients begin using the acquired knowledge. Issues and problems are worked out to ensure that the recipients are able to achieve satisfactory performance. The ramp-up stage provides a relatively brief window of opportunity to rectify unexpected problems.

*Integration (grasp).* The integration stage begins after the recipient achieves satisfactory results with the transferred knowledge. It looks at the efforts required to remove obstacles and deal with challenges to the routinization of the new practice.

Szulanski’s (1996) model of a structured knowledge transfer process has been examined empirically by a few scholars. Chua and Pan (2008) conducted a study about how a global IS department in a multinational bank transfer its business application support and development experiences from the onshore resources to the offshore resources in the four distinct stages (i.e. initiation, implementation, ramp-up and integration). Tsang (2008) adopted Szulanski’s process model to investigate how the issues related to organizational unlearning affect knowledge transfer in each stage of the transfer process. However, based on a review of literature relating to structured knowledge transfer, little research has focused on the impact of national culture on the structured knowledge transfer process. This study will adopt Szulanski’s process model to investigate the impact of national culture on structured knowledge transfer.

**The impact of national culture on knowledge transfer**

Culture is defined as a system of beliefs that are deeply embedded within the society and is reflected in the behaviors of its organizations and people (McDermott and O’Dell, 2001). The study reported here focuses on the issue of culture in knowledge transfer within offshore technical support centers based on a subset of Hofstede’s (2005) cultural dimensions. Power distance (PD) is the extent to which the members of a society accept inequality in an
organization. It reflects the non-symmetrical nature of relationships that may exist between knowledge provider and recipient. Individualism/collectivism (IC) is the extent to which a person sees himself or herself as an individual rather than part of a group. In individualistic cultures, ties among individuals are very loose. Everyone is expected to look after himself or herself. Collectivist societies reinforce the notion of group. Such cultures are generally driven by group interest rather than by self-interest. Uncertainty avoidance (UA) is the degree to which the member of a society feels uncomfortable with uncertainty and ambiguity. Masculinity/femininity (MF) is the willingness to promote societal values.

This research only focuses on power distance (PD), the level of uncertainty avoidance (UA), and individualism/collectivism (IC). Table I shows a contrast of the cultural dimension index in the PD, UA and IC among the USA, Canada and China. From Table I, it can be seen that the USA and Canada are in similar PD, UA and IC cultural dimensions, whilst the cultural dimensions between the USA and China are different.

The extant literature has identified many cultural factors that hamper knowledge transfer. First, knowledge transfers are more likely to be effective if knowledge provider and recipient are located in similar cultural contexts (Bhagat et al., 2002; Gonzalez et al., 2006; Lucas, 2006). Second, with regard to communication between the knowledge recipient and the provider, people cannot share knowledge if they do not speak a common language. In any communications-intensive knowledge transfer process, the ability to speak a common language is critical (Davenport and Prusak, 2000; Simonin, 1999). Davenport and Prusak (2000) argue that a shared language is essential to productive knowledge transfer. Without it, individuals will neither understand nor trust one another. Similarly, Grant (1996) confirms that the lack of a common language among workers in multinational corporations is a significant barrier to knowledge transfer.

Surprisingly, even though previous studies indicate the importance of national culture in the knowledge transfer process within cross-culture business context (e.g. Davenport and Prusak, 2000; Simonin, 1999), only a few researchers have proposed a theoretical framework for understanding the differences in national culture affecting knowledge transfer across culture dimensions (e.g. Bhagat et al., 2002; Lucas, 2006). There are few empirical or exploratory studies that have been done in this field. This research seeks to explore how national culture impacts on the structured knowledge transfer processes at an offshore technical support center, to investigate how the different cultural groups worked together during the knowledge transfer process and try and find the patterns in cross-cultural knowledge transfer.

Field research data collection site

This research was conducted as an interpretive case study. The site selected for this study is an offshore technical support center (TSC) located in Dalian, China. Offshore TSCs are established in a foreign country by an organization with the intention of delivering a range of services to customers over the telephone to help them resolve their technical problems. This support center has around 1,200 staff, and supports commercial customers in the Asia-Pacific region, including China (mainland, Taiwan, Hong Kong), Asia-Pacific (Japan, Korean, Australia, New Zealand), and North America (Canada, the USA). It provides support

| Table I Contrasting US, Canadian and Chinese cultural values |
|-----------------|-----------------|-----------------|-----------------|
| Cultural element | US perspective (score) | Canadian perspective (score) | Chinese perspective (score) |
| PD              | Small (40)       | Small (39)       | Large (80) |
| UA              | Strong (46)      | Strong (48)      | Weak (30) |
| IC              | Individual (91)  | Individual (80)  | Collective (20) |

Source: Hofstede and Hofstede (2005)
in Chinese, Japanese, Korean, and English, and supports users of commercial computer products such as commercial computer servers, desktops, laptops, printers and scanners.

This study focuses on the North American support team at the Dalian center. This team was founded in 2006 and was the first English IT technical support team in China. It mainly supports customers based in the USA. The products supported by this team are commercial desktops and laptops, which are commodity stand-alone products. For this type of product, the complexity of product problems and connectivity are not very high, but response time is critical. It is imperative that support agents respond to their customers’ technical problems at “lightning” speed (El Sawy and Majchrzak, 2004), and most customers’ problems are expected to be resolved at the time of first contact on the phone. In addition, this type of product is fast moving, having a short life cycle and requires the support engineers to have a high speed of learning for survival in a complex and dynamic environment. Every month new products or models are released, new problems are encountered, and new pieces of documentation are written. Therefore, the TSC requires very fast response time (ideally giving the customer a solution while they are still on the phone during the initial call), and highly skilled support engineers who have the ability to learn very quickly about product and technical innovations. That quick learning requirement implies a radical rethinking about how learning occurs during the customer support process.

The authors employ three techniques for data collection:

1. document review;
2. participant observation; and
3. semi-structured interviews.

Document review provides important background information about roles, jobs, survey results about customer satisfaction, individual support agent work performance and participant companies’ performance reports. Participant observation was facilitated because the first author, who did the field investigation, had an official position in the participant organization for a year. This person was able to interact with practically any person during their working hours to observe the people, work processes, meeting and training sessions. Semi-structured interviews were conducted with 22 key participants in the TSC with job titles including operation manager, quality auditor, culture coach, business process trainer, technical trainer, team leaders, tech leaders and technical support engineers. The interviews were conducted at the firm’s offices and lasted between 45 and 90 minutes each. Twenty interviews were recorded and subsequently transcribed. Two interviews were not recorded, so notes were made immediately after the interview.

The investigator observed knowledge transfer processes with two distinct groups of participants. Group 1 included the first batch of China-based support agents who experienced knowledge transfer from the US-based support center to the China-based support center. This group included three US trainers, five mentors, two quality auditors and 20 trainees (i.e. 18 Chinese trainees and two Canadian trainees). The investigator observed the knowledge transfer process in this group for a year (during her period of employment at the organization). Group 2 incorporated the first batch of China-based support agents who experienced knowledge transfer from experienced Chinese trainers who took on the US trainers’ position when the original US providers withdrew. This group included two Chinese trainers, one US culture coach, five Chinese mentors, one quality auditor and 15 trainees (i.e. 14 Chinese trainees and one Canadian trainee). The investigator observed the knowledge transfer process in this group for a period of six months during the research investigation.

Before the main research began, a pilot study was conducted to test whether the research method and research questions could achieve the research objectives. Ambiguous questions were revised as a result of the pilot study. Triangulation of evidence was achieved by document review and job observation and by asking the participants the same questions in different ways and at different times to confirm their opinions.
Research findings and discussion

The research examined knowledge transfer from the US knowledge provider to Chinese and Canadian recipients, and from the Chinese provider to Chinese and Canadian recipients. The study findings provide some interesting insights into the mechanism of knowledge transfer in a cross-cultural business context.

According to the data collected from participant observation, document review and semi-structured interviews at the offshore support center, it was clear that the transfer of knowledge from the US-based support center to the China-based support center could be divided into structured and unstructured knowledge transfer processes. This paper focuses only on structured knowledge transfer.

The structured knowledge transfer processes uncovered by this research can be described in four stages:

1. **Stage one – initiation.** The China-based support center searches for knowledge providers from the US-based support center.

2. **Stage two – implementation.** Knowledge recipient learns knowledge from knowledge provider.

3. **Stage three – ramp-up.** The knowledge recipient applies the acquired knowledge under supervision.

4. **Stage four – integration.** The knowledge recipient integrates what has been learned so that they can take over the full responsibilities of a support agent.

In these four stages, stage one is about the process of searching for knowledge providers, but it does not associate with any knowledge transfer activities, stage two is an explicit knowledge transfer process, while stages three and four are tacit knowledge transfer processes.

**Stage one: the initiation**

Initially, the US offshore project manager and the China-based support center operation manager identified qualified knowledge providers at the US-based support center with the necessary cultural, technical, and business process knowledge to build up the offshore knowledge transfer team. The people involved in the knowledge transfer process at the offshore TSC consisted of American business process and technical trainers, a US culture coach and US mentors.

**Stage two: the implementation – explicit knowledge transfer**

At the implementation stage, the US trainers (US culture coach, US business process and technical trainers) went to the China-based support center and provided face-to-face classroom-based training, including culture awareness training, business process training and technical training in order to develop the China-based trainees’ understanding of the basic concepts required for the technical support job. This training took an average of six to 12 weeks. The methods of knowledge transfer at this stage consisted of presentations, role-plays, real call listening and case studies, lab experiments and written tests and quizzes.
The comparison of the knowledge transfer process between group 1 (US knowledge providers to Chinese recipients and Canadian recipients) and group 2 (Chinese knowledge providers to Chinese recipients and one Canadian recipient) revealed that these two groups followed the same knowledge transfer procedure and used the same knowledge transfer materials. However, the transfer results were different.

**Group 1.** Finding 1. An environment which involves the transfer of knowledge from a knowledge provider in a small power distance culture to a recipient in a large power distance culture in an individualistic learning environment will have a negative impact on explicit knowledge transfer in a structured knowledge transfer process.

*The training style of the US knowledge provider in Group 1.* First, when transferring knowledge to China-based trainees, US providers regard themselves as equal as trainees, welcome different opinions, and encourage trainees to express their opinions directly. This might result from the US small PD culture. Second, the US providers preferred encouraging trainees to learn something by themselves, and preferred trainees to carry out self-study or personal learning, and to find a solution by themselves. The US providers were less willing to be actively involved in trainees’ learning processes. This might result from America's individualistic culture. According to Hofstede’s research, American people have an individualistic orientation. Americans are concerned about themselves and their own self-interests rather than group interest. They believe that individuals have the personal freedom and autonomy to pursue their own goals. Third, US providers’ presentations were short, concise and bullet-pointed. They did not give a lot of context information or explanations to recipients.

*Comparing Chinese and Canadian recipients in Group 1.* Chinese recipients experienced some difficulties in the transfer process due to a large knowledge gap, and cultural and communication difficulties. The knowledge gap resulted from the recipient having difficulty in absorbing the knowledge transferred from the provider, because of the recipient’s low absorptive capacity (i.e. an ability to acquire and assimilate new knowledge based on prior knowledge including basic skills, previous experiences or even a shared language; Cohen and Levinthal, 1990). In this study, most of the Chinese recipients were new graduates from the local universities or were returnees from overseas. Some recipients did not have any educational background in IT and did not have any work experience in a TSC. Because of this lack of IT educational background and TSC work experience, the Chinese recipients had a low level of absorptive capacity, which greatly increased the knowledge gap between the US providers and themselves.

Communication difficulties may result from misunderstandings when people communicate with one another. For example, when sending a message, the US provider does not encode the message in such a way as to “fit” the cultural expectations of the Chinese recipient. The Chinese recipient of the message does not decode the message in such a way as to ensure accuracy of interpretation (Hollensen, 2001). The key reason is that the cultural difference along the PD dimension between the US providers and the Chinese recipients has impeded the potential for successful knowledge transfer. The Chinese recipient has a large PD culture; people along this cultural dimension are supposed to passively accept the transferred knowledge from trainers, and the quality of learning is highly determined by the excellence of the knowledge provider (Hofstede and Hofstede, 2005). In contrast, the US providers had an individualistic culture, in which knowledge recipients are expected to show initiative, and they expected trainees to ask questions when they did not understand something. The US knowledge provider appeared to be less willing to be actively involved in the recipients’ learning process. The quality of learning is extremely dependent on the excellence of the recipients (Hofstede and Hofstede, 2005). Because of the cultural difference along the PD dimension between the US providers and Chinese recipients, the supposed two-way communication between provider and recipient could not be established, so the transfer of knowledge was less effective. On the other hand, the Canadian recipient had a similar culture (small PD and individualistic) to the US provider; he knew how to build a supposed two-way communication with the US providers, and he could...
successfully acquire knowledge from the US providers even though the Canadian recipient had a large knowledge gap with the US provider.

The research findings indicate that differences in these cultural dimensions hindered knowledge transfer between the provider and the recipient. Several studies of knowledge transfer activities between Americans and Japanese have shown that cultural difference impedes successful knowledge transfer and causes the slow achievement of knowledge transfer objectives (Inkpen, 1996). This is also found in a study of learning culture regarding Asian students who studied in Australia; Asian students were passive, unreflective rote learners, and the cultural difference between the provider and recipient negatively affected knowledge transfer (Biggs, 1997).

To overcome these difficulties, the Chinese trainees collected many documents and training materials from the US providers, and continued with much self-study. Also, they did many group studies and sought peer-to-peer help. Peer-to-peer help and knowledge sharing were the most effective ways to overcome the difficulties. Firstly, from the trainees' point of view, group mates who are proximate in experience may be better teachers than the US trainer because the knowledge gap is not as great and the level of absorptive capacity is similar. Secondly, there is a small PD among group mates, then there is no problem for Chinese trainees to challenge and argue with group mates. The small PD among group mates explains why they preferred to ask the Canadian trainee (group mate) rather than the US provider. Thirdly, shared language and culture among Chinese trainees helped them greatly in sharing knowledge and understand each other.

Group 2. Finding 2. An environment which involves the transfer of explicit knowledge from a knowledge provider in a large power distance culture to a recipient in a small power distance culture in a collectivistic learning environment will have a positive impact on the likelihood of successful explicit knowledge transfer in a structured knowledge transfer process.

The training style of Chinese knowledge providers in Group 2. When Chinese knowledge providers facilitated the training, their training presentations usually contained a lot of background information and long explanations. They were actively involved in trainees' learning processes and took more responsibility for teaching. If a trainee could not gain some knowledge or skills, the trainers would think that something could be wrong with their teaching ability. They considered that the trainer and trainees were a group and they should work together, and that the trainer should help trainees to grasp the necessary knowledge quickly. The style of knowledge transfer that is performed by Chinese trainers may partially reflect the relative collectivism of the Chinese culture, where a person sees herself as part of a group rather than an individual (Hofstede and Hofstede, 2005).

Comparing Chinese and Canadian recipients in Group 2. The transfer of knowledge from Chinese providers to Chinese recipients was very successful because of their cultural similarity, and small knowledge gaps and few communication difficulties. In contrast, knowledge transfer from Chinese providers to the Canadian recipient was less effective due to their cultural differences and knowledge gap. However, the Canadian recipient had a small PD culture; he was a proactive learner, whereas Chinese providers have a collectivistic culture, and they were keen to help trainees and became actively involved in trainee's learning process. Therefore, the Canadian recipient could acquire knowledge and overcome the cultural difficulty effectively. Several studies of knowledge transfer along different PD dimensions of the cultural index have shown that if the knowledge provider enjoys large PD and the recipient enjoys small power distance, then the recipient's success is highly dependent upon the provider's keenness to transfer knowledge (Bhagat et al., 2002; Lucas, 2006). In this study, because of Chinese providers' collectivistic culture and focus on their group well-being, they are much more willing to transfer knowledge and have a strong motivation to do so. This might be the reason why the Canadian trainee could survive in the knowledge transfer process.

Figure 1 shows a summary of the impact of national culture on stage two (i.e. implementation) of the structured knowledge transfer.
Stages three and four: ramp-up and integration – tacit knowledge transfer

Once the trainee had passed the examination of stage two, they would be assigned to a group on the live call center floor to practice applying the acquired knowledge. Each group had one US mentor who took responsibility for coaching three or four trainees. At the ramp-up stage, US mentors provided three types of training:

1. job shadowing;
2. mock call training; and
3. user accepted test (UAT).

Job shadowing is a training program for trainees to learn about a job as a shadow to a mentor as they go through a normal day work. Mock call is similar to role play, but it is played out in a real situation, where the trainee has a headset on his/her head and all knowledge base and support tools opened and ready for use on their computer screens. Their mentor, playing the role of a customer, would call the trainee and give the trainee a tough scenario in which the trainee had to find a solution for a problem. The UAT is a test to evaluate trainees, to assess whether their services can be accepted by US customers.

Once trainees had passed UAT, they were ready to take over full responsibility with little support from the US-based support agent. They would start to handle real calls by themselves, and would apply what they had learned in their daily job. Eventually, the acquired knowledge is internalized and becomes tacit knowledge. At the integration stage, the trainees would be supervised by mentors and a quality auditor. The methods of knowledge transfer at this stage consisted of monitoring and quality auditing. Monitoring occurred when the mentor supervised trainees’ call handling processes, and provided support when the trainee needed help. Quality auditing was an ongoing support agent assessment process carried out by the quality auditor. The quality auditor would give feedback to the support agent and provide one-to-one coaching and, as well, would develop an action plan to help the support agent overcome his/her weaknesses.

The comparison of the knowledge transfer process between group 1 and group 2 showed that two groups followed the same knowledge transfer procedure and used the same knowledge transfer materials, but the transfer results were different.

Group 1

Finding 3: A weak relationship between a knowledge provider and a recipient, created by cultural differences, negatively impacts on tacit knowledge transfer in a structured knowledge transfer process.
Finding 4. A strong relationship between a knowledge provider and a recipient, created by similarity in culture, positively facilitates tacit knowledge transfer in a structured knowledge transfer process.

The training style of the US knowledge provider. At the ramp-up stage, the US mentor required trainees to undertake a great deal of learning by observation (e.g. job shadowing), by trial (e.g. mock call), by self-reflection and by feedback. In self-reflection, the mentor encouraged a self-evaluation after she/he finished the mock call. The self-reflection encourages deeper exploration of the issues the trainee has, and makes her/him clear about what critical skills she/he lacks. Feedback from mentor and group mates on good aspects of the task performed by the trainee confirmed in the trainee’s mind that they had actually absorbed knowledge and helped to build up the trainee’s confidence. Feedback about bad aspects on the task identified the weaknesses on which the trainee needed to improve.

At the integration stage, trainees received little supervision from the US mentor. He trusted the trainees’ ability, pushed hard to have trainees take on more responsibilities, and allowed trainees to make mistakes and then asked them to correct the mistake by themselves. He provided support only when the trainee encountered a tough problem. This approach might have its roots in the American strong UA culture.

Comparing the Chinese and Canadian recipients in this group. The Chinese recipients experienced more difficulties than the Canadian recipient. They felt frustrated during the tacit knowledge transfer process. This was caused by cultural and communication difficulties between US providers and Chinese recipients due to lack of language proficiency and a large PD culture gap. These cultural and communication difficulties brought on misunderstanding and distrust between US providers and Chinese recipients, and resulted in a weak relationship, the weak relationship, without sufficient interpersonal communication between providers and recipients, severely hampered the successful tacit knowledge transfer. For instance, a Chinese trainee said:

I felt very frustrated, you know, when I listened to the real call between my mentor and a customer. I had trouble with the difficulty of words being used, and the accents. When we had a discussion and I spoke in English, my mentor quickly stopped paying attention and finished my sentences. After the mock call training, I did not really understand what was agreed to, and what I had to do. I hoped the mentor would hand out a context document so that I could take my time in absorbing the information from the training, but he didn’t. I’m very upset; two weeks have gone by, but I still can’t imitate my mentor’s way of handling a customer’s call.

While Canadian recipients experienced some difficulties such as knowledge gaps, they established a strong relationship with the US providers, and had close personal discussions with them, which enabled them to overcome transfer difficulties effectively. Several studies showed that it is easier to transfer knowledge within a strong relationship and more difficult to transfer knowledge in a weak relationship (Dhanaraj et al., 2004; Reagans and McEvily, 2003).

Tacit knowledge transfer generally requires extensive personal contact (Davenport and Prusak, 2000). In order to overcome the knowledge transfer difficulties, the operation manager at the China-based support center facilitated some joint activities such as team building or social entertainment activities to strengthen the interpersonal relationships between the Chinese trainees and US providers. This was done to improve interpersonal communication and to facilitate tacit knowledge transfer. Secondly, Chinese trainees made more efforts with self-study and practice. They listened to many good calls and imitated the way that experienced agents handled the call. Thirdly, group studies and peer-to-peer help and knowledge sharing within the group effectively assisted the Chinese trainees to acquire tacit knowledge.

Group 2

Finding 5. Where a knowledge provider comes from a strongly collectivist-orientated culture, there will be a greater likelihood of successful tacit knowledge transfer in a structured knowledge transfer process.
The training style of the Chinese knowledge providers in Group 2. The Chinese mentors used similar coaching methods to the US mentors to enable trainees to learn by doing, learn by observing, learn by thinking, and learn by self-reflection. Besides these methods, the Chinese mentors also tried converting tacit knowledge to explicit knowledge. They worked with the culture coach and summarized the standard call script (a better way to communicate with customers, and help Chinese agents express themselves clearly on the phone), and they handed out many call scripts to the Chinese trainees, in order to let them practice and remember the techniques.

The following is an example of the basic call flow script:

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Thank you for calling XX Commercial Desktop Support.
My Name is _________.
May I have your name please?
Is this call regarding a new case or would this be an existing case today?

IF NEW CASE
May I have the Serial number of your computer?

IF EXISTING CASE
May I have the case number?

PROCEED WITH TROUBLESHOOTING
How may I help you today?

IN CASE OF HOLD:
May I place you on hold for a few minutes while I research on this issue.
Thanks for holding.

CLOSING
Is there anything else I can assist you with?
Thanks for calling XX services.
Have a great day ___ [caller's first name].
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At the integration stage, the Chinese mentor sat beside a trainee and kept an eye on the trainee's call handling process. If he found a potential mistake made by the trainee, he would interrupt the trainee and let him/her correct the mistake on the phone immediately. This is attributed to Chinese weak UA culture, in that Chinese would not like to take risks. In that situation, the Chinese trainer would rather spend plenty of time monitoring the trainee as a way of reducing the trainee's possibility of making an error.

Comparing the Chinese and Canadian recipients

it was found that the transfer of knowledge from Chinese providers to Chinese trainees was significantly successful. Even though there were some difficulties such as knowledge gaps, the Chinese providers knew how to transfer knowledge to the Chinese trainees and help them to overcome the difficulties. Their help included converting tacit knowledge to explicit knowledge, closely supervising the Chinese recipients and providing as much support to them as possible. However, compared with this situation, the tacit knowledge transfer from the Chinese providers to the Canadian recipient was relatively less effective because of the cultural and communication difficulties between the provider and recipient. The Chinese providers and the Canadian recipient invested a great deal of effort during the knowledge transfer process, and they overcame the difficulties.

Comparing the Chinese and US providers in two groups, the collectivistic attitudes dominant in the culture of the Chinese providers gave them a better ability to transfer knowledge that was tacit. This is consistent with Bhagat et al.'s (2002) study of cross-border transfer of organizational knowledge. Since the Chinese providers focused on their group's well-being, they were more willing to transfer their skills and had strong motivation to do so during the tacit knowledge transfer process. This willingness was reflected in two ways: first, they were
more likely to share the tips which they have gained from their many years of practice, so that many trainees could internalize their skills quickly. Second, they were patient and very willing to take responsibility for helping trainees and becoming actively involved in the trainees’ learning process. The proactive teaching attitude of the Chinese providers positively impacted on the tacit knowledge transfer. This is consistent with the theory that tacit learning is not merely “learning by doing” or experiential learning, but frequently involves the active involvement of the knowledge provider (Dhanaraj et al., 2004).

Figure 2 summarizes the impact of national culture on the stage three (ramp-up) and stage four (integration) of the structured knowledge transfer.

A comparison of Group 1 and Group 2

Finding 6. The transfer of knowledge will be more effective if knowledge provider and recipient are located in similar cultural contexts rather than in different cultural contexts.

Comparing two groups in the explicit and tacit knowledge transfer process, it was found that knowledge transfers were more likely to be effective if a knowledge provider and a recipient were located in similar cultural contexts. Where a knowledge provider and a recipient were located in different cultural contexts knowledge transfers were likely to be less effective. For instance, during the explicit knowledge transfer, a transfer of knowledge from US providers to Canadian recipients was more effective than that of transfer to the Chinese recipient. Also, a transfer of knowledge from Chinese knowledge provider to Canadian recipient was less effective than that of Chinese provider to Chinese recipients. During the tacit knowledge transfer, a transfer of knowledge from US mentors to Canadian trainees was easier than for Chinese trainees. In addition, a transfer of knowledge from Chinese mentors to the Canadian trainee was harder than that of the US mentor to the Canadian trainee. The study findings were consistent with previous studies on knowledge transfer in a cross-cultural business context (Bhagat et al., 2002; Lucas, 2006).

Conclusions, implications, and future study

This study has looked at the structured knowledge transfer processes at an offshore TSC. From the observations made in this research, Szulanski’s (1996) four stages of knowledge transfer – i.e. initiation, implementation, ramp-up, and integration – were confirmed as a useful guide to structured knowledge transfer processes. Six research findings identified in this paper provide insight into the cultural issues implicated in the structured knowledge transfer process. The study findings are not only consistent with previous theoretical studies on knowledge transfer in a cross-cultural business context, but also go further. There was strong evidence that different IC, PD, and UA cultural dimensions significantly impacted on knowledge transfer in a cross-cultural transfer of organizational knowledge.

<table>
<thead>
<tr>
<th>Figure 2</th>
<th>National culture impacts on the ramp-up and integration stages of knowledge transfer</th>
</tr>
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<tbody>
<tr>
<td>US Provider</td>
<td>Chinese Provider</td>
</tr>
<tr>
<td>Individual, Small PD, Strong UA</td>
<td>Collective, Larger PD, Weak UA</td>
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<tr>
<td><strong>Canadian Recipient</strong></td>
<td><strong>Chinese Recipient</strong></td>
</tr>
<tr>
<td>Individual, Small PD, Strong UA</td>
<td>Collective, Larger PD, Weak UA</td>
</tr>
<tr>
<td>Effective, a few barriers: knowledge tacitness and knowledge gaps</td>
<td>Effective, some barriers: knowledge tacitness, knowledge gaps, cultural &amp; communication difficulties</td>
</tr>
<tr>
<td>Less effective, major difficulties: communication &amp; cultural difficulties, weak relationship, knowledge tacitness, great knowledge gaps</td>
<td>Most effective, a few barriers: knowledge tacitness, knowledge gaps</td>
</tr>
</tbody>
</table>
Despite conducting interviews with a broad range of people who work within the technical support center studied, and attempting to gain the best possible quality of information through the use of a variety of data acquisition methods, there are still a number of limitations of this study. The main limitation is that the research involved one organization in one industry (the IT support industry) and in one country (China). There could be both industry-specific issues as well as national cultural issues that might affect the findings and conclusions.

This paper has important practical implications for organizations that are trying to carry out transfer of organizational knowledge, and organizations that are trying to acquire organizational knowledge in a cross-cultural business context. The findings suggest that knowledge providers should find ways to introduce “foreign” knowledge to recipients, whilst still valuing local learning culture, knowledge and skills. Second, recipients should build a good relationship with the providers through joint activities such as team building or social entertainment activities, which may help recipients establish a good interpersonal relationship with providers and have further interpersonal exchanges of knowledge. Third, encouraging peer-to-peer help and group knowledge sharing can help recipients to share and grasp each other’s knowledge because they would become closer in shared experiences, the knowledge gap would not be as great and the level of absorptive capacity would be similar. Finally, it is suggested that the knowledge recipients’ company should develop a plan to nurture a few recipients as knowledge seeds and future knowledge providers. Once the original knowledge providers have withdrawn, the “seeds” can take on the knowledge providers’ positions.

The research findings presented in this paper, based on case analysis, are consistent with existing theory. It would be desirable to further test these findings empirically in additional cultural and organizational contexts. Such a study would provide insight into the cultural issues implicated in the structured knowledge transfer process when a knowledge provider and a recipient are along different cultural dimensions, as well as offer more general insight into the mechanism of knowledge transfer in the cross-cultural business context. It is hoped that the findings of this study will contribute to an understanding of the knowledge transfer processes when US-based firms outsource business processes to offshore countries that have significantly different cultural contexts. It is hoped that the findings of this study will stimulate further theory building and research into the cross-cultural transfer of organizational knowledge.

References


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