Exploring Socio-Cognitive Factors Contributing to Knowledge Transfer

ABSTRACT

This study explores the socio-cognitive factors that contribute to effective knowledge transfer. In addition to socio-cognitive factors, this study will also explore two other oft-researched antecedents to knowledge transfer - knowledge characteristics and organisational culture, and investigate how socio-cognitive factors play a part in these relationships. The results show that socio-cognitive interactions between knowledge senders and receivers play an important contributing factor towards effective knowledge transfer, and can also act as an important intervening variable in the relationship between knowledge characteristic and knowledge transfer, as well as the relationship between organisation culture and knowledge transfer.

**Keywords:** Organisational learning, knowledge management or transfer, organisational culture, organisational effectiveness

INTRODUCTION

The study of knowledge (and its creation, transfer and application) in organisations has intrigued both practitioners and academics for many decades. First references to the role of knowledge in the context of organisational learning appear as far back as in the 1960s (Cangelosi and Dill 1965; Cyert and March 1963). In order to further the understanding of knowledge, researchers have focused their attention to one aspect knowledge in organisations – knowledge transfer (Argote and Ingram 2000; Kogut and Zander 1992; Szulanski 2000). When defining knowledge transfer, definitions can be understood in two parts - either the actual *process* of the transfer, or the *outcome*. For example, Argote and Ingram (2000) define knowledge transfer "as the process through which one unit (e.g., group, unit, or division) is affected by the experience of another" (p. 151). Argote and Ingram (2000) then further this *process-based* definition when they state that the transfer of knowledge is either measured through a change in performance or a change in actual knowledge states (i.e., an *outcome-based* definition). This study takes on a holistic approach in defining knowledge transfer. That is, it is important to understand the transfer of knowledge from both the "process" and the "outcomes" point-of-view. In other words, for this study, knowledge transfer is deemed "effective" when the *process* of knowledge occurs, but also when
experience of organisational members is affected, either through the resulting performance or change in knowledge state (outcomes).

To date, researchers have espoused knowledge transfer as an important source of competitive advantage (Osterloh and Frey 2000; Argote and Ingram 2000; Kogut and Zander 1992). In other words, they believe that the efficient transfer of knowledge determines the effectiveness and competitiveness of the firm. More specifically, because the efficient transferring of knowledge, especially tacit knowledge, is a capability that is difficult for competitors to imitate, it is deemed as a crucial source of sustainable competitive advantage (Teece 1998). Tacit knowledge is knowledge that is "difficult to express, formalize or share" (Lubit 2001, p. 166), while explicit knowledge is defined by Kogut and Zander (1992, p. 386) as "information which can be transmitted without loss of integrity once syntactical rules require for deciphering it are known". In understanding the roots of competitive advantage, it is particularly relevant to study the transfer of tacit knowledge (Easterby-Smith and Lyles 2005). Easterby-Smith and Lyles (2005, p. 8) claim that "it is the unexpressed knowledge and experiences of organizations which provide the unique competencies that cannot be replicated by competitors". However, it is in the very same ambiguity in tacit knowledge that makes it difficult to move across cultural boundaries and even across different parts of the same organisation (Makino and Inkpen 2003; Szulanski and Capetta 2003). Thus knowledge transfer can be established as an integral component of an organisation's competitive advantage, and is therefore crucial to investigate the enablers of such transfer.

Through a content analysis review of 135 articles from 1980 to 2004, Liu (2007) identified as many as 15 levels of analysis in knowledge transfer studies. Liu (2007) explains that a large proportion of these studies focused on inter-regional, inter-industry and inter-organisational levels of knowledge transfer, and that there was a lack of intra-organisational level studies. In another review, Wang and Noe (2010) organised the research on knowledge transfer based on areas of emphasis such as organisational context, interpersonal and team characteristics, cultural characteristics, and motivational factors. Specifically, under organisational context, many studies have explored the effect of organisational culture on knowledge transfer. However, despite the wide range of studies on organisational culture, Wang and
Noe (2010) note that these studies have been inconclusive in understanding the effects of organisational culture on knowledge transfer. They suggest that results on organisational culture as an antecedent is "mixed", in that studies depict an unclear relationship between organisational culture and knowledge transfer (p. 118). Perhaps more tellingly, current studies are not conclusive of which cultural dimensions most affect knowledge transfer, despite trust garnering the most attention (Wang and Noe 2010). In addressing the current gap in the literature, this study aims to further the understanding of the organisational culture-knowledge transfer relationship in light of socio-cognitive factors.

The concept of "socio-cognition" in itself has been used very loosely in research as it has been defined variably to serve many different purposes. For instance, Ginsberg (1990, p. 521) define a socio-cognitive approach as "how managers draw upon the different cognitive abilities available among their membership" to make strategic decisions. In social psychology, the term "social cognition" has even further roots. Fiske and Taylor (1984) define social cognition as "the study of how people make sense of others and of themselves" (p. 1). Here, the concept is grounded in a wider agenda of "how ordinary people think of people, and how they think they think of people (Fiske and Taylor 1984, p. 1). Bandura's (1986) Social Cognitive Theory states that a triadic reciprocally deterministic relationship exists between one's personal factors, social factors and resulting behaviour. Here, the emphasis placed by Bandura (1986) is that learning occurs primarily through observation. As illustrated, the term "socio-cognition" can be used and understood very differently in research. Thus, it is important that this concept is defined clearly for the purposes of this study. Specific to knowledge transfer, a socio-cognitive approach can be considered as an interplay between social practices and cognition. The following section outlines the theoretical background and objectives of the study.

THEORETICAL FRAMEWORK AND PROPOSITIONS

Socio-Cognition and Knowledge Transfer

Ringberg and Reihlen (2008) claim that a social constructionist (socio-) approach is lacking because it assumes that practices in and of themselves carry the codes necessary for decoding, and hence effective transfer of knowledge. This disembodies knowledge from the true holders and creators – the
individuals. However, an issue with simply focusing on individual cognition (cognitive) to account for effective knowledge transfer lies in the fact that individual cognition is less useful in understanding organisational behaviour and learning than individual learning behaviour (Cook and Yanow 1993; Easterby-Smith et al. 1998). Thus, a recent call has been made to merge the two streams of literature – i.e, socio-cognitive – (Foss et al. 2010; Spraggon and Bodolica 2012) to study knowledge transfer. As suggested by scholars, adopting a combinative socio-cognitive lens to knowledge transfer will potentially shed more light into the uncovering the contributing factors to effective knowledge transfer.

As deliberated, the conceptual justification to adopt a socio-cognitive approach to study knowledge transfer begins with the flawed notion that knowledge can exist exogenously from the users of knowledge. Specifically, the two major epistemological approaches to knowledge transfer studies both erroneously assume that meaning and knowledge can exist independently from that of the cognizing mind. As such, researchers like Ringberg and Reihlen (2008) and Foss et al. (2010) have suggested adopting a holistic approach to knowledge transfer by considering the effects of an amalgamation of social practices and the cognizing mind. In particular, to investigate the reciprocal nature of the two concepts to better understand their related dimensions, and ultimately, how they contribute to effective knowledge transfer. Additionally, Akgün et al. (2003) deliberate that although most work on social cognition emphasise that knowledge structures (cognition) affect an understanding of social interaction, these knowledge structures were actually first developed through prior social interactions with others. However, these discussions were made in light of organisational learning, and not specific to knowledge transfer. It is therefore in this vein that this study positions socio-cognitive interactions as an antecedent to knowledge transfer.

In a socio-cognitive model proposed by Ringberg and Reihlen (2008), interactions between social and cognitive elements produced four different knowledge transfer outcomes. This study builds upon Ringberg and Reihlen’s (2008) conceptual paper by exploring the impact of socio-cognitive interactions on knowledge transfer effectiveness. However, this study recognises that the concept of cognition may not exist entirely on a reflective-categorical thinking dichotomy as proposed by the authors, and will be
more open to other social-cognitive interactions. Furthermore, this study will not focus solely on the
effects of high or low levels of socialisation, and instead, allow for the data to determine the important
aspects of socialisation in a socio-cognitive interaction relationship. From this, the study presents the
following relationship:

*Proposition 1: The greater the amount of socio-cognitive interactions between senders and receivers of
knowledge, the more effective is the knowledge transfer.*

**Knowledge Characteristics, Socio-Cognition and Knowledge Transfer**

The study of knowledge transfer is better served through the understanding of its characteristics.
The extant literature has made clear epistemological distinctions of knowledge. Some knowledge
definitions include knowledge being either tacit or explicit (Polanyi 1966), "know-how" or "know-what"
(Ryle 1949), and declarative or procedural (Singley and Anderson 1989). Knowledge transfer has also
been described as "sticky" due to high levels of causal ambiguity (Szulanski 1996). Thus, the
effectiveness of the transfer will be influenced by the characteristics of knowledge.

In her study, although Minbaeva (2007) found that knowledge characteristics significantly
influenced knowledge transfer, she explained that this antecedent "lost its importance" when the other
independent variables were introduced (p. 587). To this end, she argues that this finding is interesting, as
"many researchers have offered excessive praise for the importance of knowledge characteristics"
(Minbaeva 2007, p. 587). Szulanski and Capetta (2003) further this, claiming that "knowledge stickiness
involves not only attributes of the knowledge itself, but attributes and choices made by information
seekers and information providers (p. 528). As such, it is important to explore other contributing factors
to effective knowledge transfer, other than knowledge characteristics. In this study, socio-cognitive
interaction is proposed as the intervening variable between knowledge characteristics and knowledge
transfer. It is likely that these interactions would be related to the characteristics of the relationships
between knowledge senders and receivers. That is to say, the amount of socio-cognitive interactions could
be a further result of these relationships, and understanding these interactions will prove to be more useful
in determining effective knowledge transfer. To explore these relationships, we present the following:
**Proposition 2:** The level of socio-cognitive interactions (between senders and receivers of knowledge) is influenced by knowledge characteristics. That is, if the knowledge being transferred is highly tacit, there is a need for higher levels of socio-cognitive interactions.

**Proposition 3:** Knowledge transfer effectiveness is influenced by knowledge characteristics. That is, the higher the level of knowledge tacitness, the less effective is the knowledge transfer. Conversely, the higher the level of knowledge explicitness, the more effective is the knowledge transfer.

**Proposition 4:** There is an interaction effect between knowledge characteristics and socio-cognitive interactions (between senders and receivers of knowledge), on the effectiveness of knowledge transfer. That is, socio-cognitive interactions will reduce the negative impact of knowledge tacitness on knowledge transfer effectiveness.

**Organisational Culture, Socio-Cognition and Knowledge Transfer**

Davenport and Prusak (1998) claim that "knowledge transfer methods should suit the organisational culture and climate" (p. 92). It is through this vein that we position the role of organisational culture as an important antecedent for knowledge transfer. As discussed earlier, the extant research that investigates organisational culture as an antecedent to knowledge transfer has produced mixed results. The results are mixed for two reasons. Firstly, extant research is inconclusive on which organisational culture dimensions contribute most to a learning organisational culture, despite trust garnering the most interest (Wang and Noe 2010). Secondly, the same dimensions were found to have significantly different, sometimes even opposite, effects on knowledge transfer (Taylor and Wright 2004; Lee, Kim and Kim 2006). Wang and Noe (2010) suggest that this indicates that the relationship between a learning organisational culture and knowledge transfer might be mediated or moderated by other constructs. For example, Lin and Lee (2006) purported that managerial perceptions of the advantage of knowledge transfer act as a mediator in the organisational culture-knowledge transfer relationship. To further explore other intervening variables, this study will investigate if socio-cognitive interactions will have a moderating effect between organisational culture and knowledge transfer.

**Proposition 5:** A learning culture will result in higher levels of socio-cognitive interactions between senders and receivers of knowledge.

**Proposition 6:** A learning culture will improve an organisation's knowledge transfer effectiveness.
**Proposition 7:** There is an interaction effect between a learning culture and socio-cognitive interactions (between senders and receivers of knowledge), on the effectiveness of knowledge transfer. That is, socio-cognitive interactions will increase the positive impact of a learning culture on knowledge transfer effectiveness.

Figure 1 presents the conceptual model for the study. The objective of this research is to explore (through a qualitative study) the relationships outlined in the conceptual model, rather than to provide an empirical test of the model. An exploratory study using grounded theory approach is necessary at this stage as the key objective is theory building, rather than theory testing.

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**METHODS**

**Sampling and Data Collection Procedures**

This study was set in a multinational company (henceforth referred to as ‘Aria’) that operates in the resources sector across several business units in Australia and overseas. This study will deal with knowledge transfer to three of these units, henceforth referred to as Watara, Kinone and Petra.

More specifically, this study is concerned with the issues of effective knowledge transfer as demonstrated by technology and practice implementations within the business units. Aria sources technology in two ways, either purchased from outside or developed "in-house" primarily through a centralised research unit henceforth referred to as Cool Toys Lab (CTL). In either case CTL personnel work closely with stakeholders from each unit to look at ways to develop and introduce new technologies that either: (1) helps in introducing new and more efficient methods of producing the product, (2) improves existing technology, or (3) to delivers cost savings to the units. Aria has provided this research project access to personnel involved in the development of three new technologies (henceforth TechOne, TechTwo and TechThree) and its deployment across three business units (Watara, Kinone and Petra). As a result, such a setting provided an opportunity to investigate the factors contributing to effective knowledge transfer (in this case, the deployment of three new technologies across three organisational units). Investigating three
autonomous business units also provided the opportunity to investigate the effect of variations in learning culture across the different units.

The study covered 21 semi-structured in-depth interviews, involving 23 employees in Aria across the three units. Due to scheduling inconveniences, two of the interviews were conducted with two interviewees, instead of one. The interviews were all conducted in-situ, as the researcher was afforded the opportunity to be allowed into the company offices to conduct the interviews. The questions were designed around the propositions introduced in the previous section and interviews lasted approximately 60 minutes each (See Appendix 1 for Interview Schedule).

The interviewees are managers, supervisors, scientists and engineers who are selected on the basis of their involvement with the three chosen technologies that this research will investigate. More specifically, the sampling of interviewees took into account the need to include both senders and receivers of knowledge across the three technologies being investigated, as well as the need to sample from each of the three units. Also, depending on the stage of their involvement in the implementation of new technology, the same interviewee can be both a sender as well as a receiver (see Table 1 for Profile of Interviewees).

Analysis

The interview responses were transcribed verbatim and then imported into NVivo10 and for both manual line-by-line coding and data analysis. Thematic analysis was employed as a method for identifying patterns (themes) within the data to understand the phenomenon in question (Boyatzis, 1998). This was achieved through an open line-by-line coding process in which nodes were both deductively and inductively generated from the literature and from the interviews. Allowing the data to "speak" for itself with little reference from extant literature is akin to the "Straussian" Grounded Theory approach (Strauss and Corbin 1990). As deliberated by Strauss and Corbin (1990), this approach allows for themes and issues to be observed from the data through a process of coding, identifying themes and concepts from
these nodes, and drawing relationships from these themes. Coding is defined as "identification of key points around which data can be gathered" (Strauss and Corbin 1990, p. 75). In Nvivo10, the coding process generated nodes that were later analysed to derive at relationships and themes that addressed the research objectives. However, as mentioned above, nodes are not purely generated from data, and may also be pre-derived from constructs in extant literature to assist in developing better understanding of data, and in turn help in addressing research objectives.

RESULTS

Socio-Cognition and Knowledge Transfer

A large number of the interviewees had indicated that they felt that socialisation played a role in the effective transfer of knowledge. However, understanding the cognitive factors that led to successful transfer of technologies was not as straight forward. From the responses provided by the interviewees, there were not many instances when cognitive factors were explicitly mentioned as factors leading to effective knowledge transfer. Interestingly, despite the fact that interviewees could not often indicate how cognition leads to effective knowledge transfer, there was an observed increase in the amount of times cognition was alluded to when discussed in tandem with socialized practices. For instance, one of the interviewees related to how:

"A phone call or a face-to-face chat (will lead them to) ponder about their advice and then go back again if we have further doubts or questions". (Interviewee 16)

Another response indicative of this relationship was:

"When an opportunity is realized, two people get together to talk. They might go away after the meet and think about the tech, or present to their bosses, but then they will come back and meet again to continue the conversation". (Interviewee 3)

The responses always reflected the two concepts being discussed in relation to one another when referring to instances of successful knowledge transfer, seemingly suggesting the nature of a recursive relationship.
Knowledge Characteristics, Socio-Cognition and Knowledge Transfer

When describing the impact of tacit and explicit knowledge on effective knowledge transfer, the interviewees unanimously agreed that technologies that were more tacit were more difficult to transfer, while technologies that were more explicit by nature were easier to transfer. However, despite having an apparently clear and common agreement of the relationship, the interviewees did not appear as uniformed in their assessment of the characteristics of the three technologies. That is to say, the data indicates disparate perspectives on the tacitness and explicitness of TechOne and TechTwo, but agreed that TechThree was mostly explicit.

Additionally, and perhaps interestingly, there were contradicting views on whether technologies that were initially assessed as tacit were actually more difficult to transfer. This contradiction in views was evident throughout many of the interviewees. The reverse was also evident. That is, interviewees who claimed explicit knowledge was easier to transfer could not explain why they also thought certain explicit technologies had ended up not being transferred as smoothly. To this end, the interviewees felt that other reasons could possibly intervene the characteristic-transfer relationship. Specifically, some of them alluded that socio-cognitive interactions may explain why the relationship is not as clear cut as initially expected. For instance, one of the responses indicated that:

"Yes, it is clear why socialization is important when faced with the more tacit forms of knowledge. You know you need that time to socialize about knowledge that is harder to transfer, but also to think about it on your own. I think people underestimate the need to think about things by yourself."

(Interviewee 16)

Another interviewee also stated that:

"I think that is hard yes, but it will definitely be a lot easier if you could be critically assessing new ideas, and then see how your thoughts line up with others in meetings or conferences. That can possibly help in breaking down and understanding tacit knowledge."

(Interviewee 21)
Organisational Culture, Socio-Cognition and Knowledge Transfer

The data suggested that interviewees had varied views on the dimensions of organisational culture that influenced effective knowledge transfer. Some of them feel that trust is the most important element in an organisation's culture in order for knowledge transfer. One of the interviewees reflected on how he was:

"Developing relationship with the new engineers so all this cycle continues so it's really important for them to trust you as well for knowledge to be transferred." (Interviewee 14)

Risk profile was the second dimension that was mentioned by the interviewees. Specifically, they felt that a unit's propensity to take risks affected knowledge transfer. This was espoused in one of the interviewee’s responses when he claimed:

"Kinone is a good example of where a higher level organisational support for being able to take risks would have benefitted Kinone." (Interviewee 20)

The third common dimension that was raised by the interviewees was that of proactivity and initiative taking. This was again reflected when an interviewee stated:

"Watara has been very aggressive, forward in pulling that technology and trying to help it work. There is really positive thing that they saw and are still manipulating it." (Interviewee 2)

Interviewees were also seemingly quite expressive of how organisational culture could lead to instances of socialization. Specifically, they refer to researchers from the CTL as having "good relationships" with them, which stems from a high level of "trust", which then leads to socialisation events such as "having a good time outside of work" and even "going overseas". This high level of socialisation and relationship building was a result of the unit displaying the appropriate aforementioned culture dimensions.

DISCUSSION

One of the main objectives of this study was to explore the effects of socio-cognitive interactions between the senders and receivers of knowledge, on the effectiveness of knowledge transfer. The findings do in fact shed light into this relationship. Specifically, there seems to be a reciprocal relationship that
exists between socialising and the cognising mind. Some interviewees related explicitly to this reciprocity, stating that the transfer of knowledge was only effective when there were gaps between socializing encounters to allow for reflection. The results alluded to the interviewees reaching a higher level of understanding each time they were allowed to "ponder and reflect" upon newly acquired socialised information, so much so that more "sense" was made and "perceptions" were aligned before the next round of socialization. Once socialisation occurs, the process of challenging mental cognition occurs again. Consistent with Ringberg and Reihlen’s (2008) arguments, there is evidence of an upward spiral of understanding, suggesting that knowledge will be transferred more effectively with each iteration of socio-cognitive interaction.

With regards to knowledge characteristics, the results confirmed Szulanski’s (1996) arguments that explicit knowledge was easier to transfer, while tacit knowledge was the more difficult counterpart. However (and more interestingly), the interviewees were not unanimous on their assessment of each particular technology's characteristics. More importantly, what was previously identified as tacit was found to be not that difficult to transfer, while some found difficulty in transferring explicit technologies. A few of the interviewees even specifically alluded to socio-cognitive interactions being the intervening factor. Interviewees stated that "communication and reflection" will help to pass on "tacit knowledge", as well as suggesting that senders of the knowledge should "spend more time" with the receivers to pass on the "harder to transfer forms of tacit knowledge". This finding contributes to the literature by positioning socio-cognitive interactions directly as an important contributing factor to knowledge transfer effectiveness, rather than knowledge characteristics per se.

Based on the analysis of the interviews, some dimensions of organisational culture were often referred to as contributing towards effective knowledge transfer. These dimensions were that of trust, proactivity and initiative, as well as risk profile. Thus, the elements of culture referred to by the interviewees reflect the desired cultures of the units they worked in. These findings contribute to the organisational culture literature as it lends further support to the increasing attention paid to trust as an important dimension (Wang and Noe 2010). However, the findings can also add to the literature by
suggesting that proactivity and risk profile might be other dimensions that warrant further research when trying to determine which organisational culture dimensions are most influential in knowledge transfer.

In conclusion, the study has shown the significance of investigating knowledge transfer via a socio-cognitive lens. Particular from a managerial perspective, in order to promote more effective knowledge transfer, organisations can develop new, or alter existing policies and practices that create or facilitate socio-cognitive interactions.

REFERENCES


Figure 1: Conceptual Model
Table 1 - Profile of Interviewees

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Position</th>
<th>Associated Unit</th>
<th>Technology Involved in</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manager</td>
<td>Global</td>
<td>All 3</td>
<td>Sender + Receiver</td>
</tr>
<tr>
<td>2</td>
<td>Manager</td>
<td>Global</td>
<td>All 3</td>
<td>Sender</td>
</tr>
<tr>
<td>3</td>
<td>Manager</td>
<td>Kinone</td>
<td>All 3</td>
<td>Sender + Receiver</td>
</tr>
<tr>
<td>4a and 4b</td>
<td>Managers</td>
<td>Kinone</td>
<td>All 3</td>
<td>Sender</td>
</tr>
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<td>TechOne</td>
<td>Receiver</td>
</tr>
<tr>
<td>6</td>
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<td>TechTwo</td>
<td>Receiver</td>
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<td>Sender</td>
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<td>8a and 8b</td>
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<td>TechOne</td>
<td>Receiver</td>
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<td>TechThree</td>
<td>Receiver</td>
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<td>Sender</td>
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Appendix A: Interview Schedule

General
1. Tell me about yourself – nationality, employment length, age range
2. What are your general roles and responsibilities at Aria?
3. What is your understanding of the tech deployment process (in general) here at Aria? (People involved, timeframe, efficiency)

Technologies
1. What is your understanding of TechOne/TechTwo/TechThree (choose specific one)
2. How and when did you first get introduced to this technology?
3. What is your day-to-day involvement with this technology?

Sender/Receiver Role
1. As a receiver/sender (choose), what is your role with regards to the transfer this technology?
   (what do you do, what is your involvement)
2. What do you think are the important factors to achieve successful transfer of the knowledge of this technology?
3. What were the general difficulties involved with the transfer of the knowledge of the technology?
4. What were the reasons behind the success of the transfer of the knowledge of the technology?
5. Are there other ways in which you feel the transfer of the knowledge can be improved?
6. Do you think the relationship between the sender and receiver of knowledge impacts the transfer process? If so, how and why?
7. Are there other important elements to successful transfer?

Nature/Characteristics of Knowledge
1. With regards to knowledge of the technology transferred, would you consider it to be more tacit or explicit?* Why?
   *Tacit: Knowledge that is not easily shared or transferred by writing or verbalizing.
   (For example: Riding a bicycle, playing a piano)
   Explicit: Knowledge that is easily shared as it is easily written, articulated and stored.
   (For example: Instruction manuals, food recipes).
2. Are there other characteristics that you would associate with the knowledge behind this technology?
3. Does the nature of the knowledge (tacitness/explicitness) impact the transfer process? If so, how and why?
4. Based on the answer in 3 -> Do you feel that interactions within employees here have an impact on this relationship?
5. Are there other important elements?

Organisation Culture
1. Briefly describe the climate of work here at Watara/Kinone/Petra (choose)
2. Does this climate affect knowledge transfer (hinders/promotes?) If so, how and why?
3. Based on the answer in 2 -> Do you feel that interactions within employees here have an impact on this relationship?
4. Are there other important elements?

Conclusion
1. Do you have any involvement with the other two technologies (TechOne/TechTwo/TechThree)?
2. Do you think the deployment of these other technologies were successful? Were they different in terms of success to (technology in question)? If so, how?
ABSTRACT

This study explores the socio-cognitive factors that contribute to effective knowledge transfer. In addition to socio-cognitive factors, this study will also explore two other oft-researched antecedents to knowledge transfer - knowledge characteristics and organisational culture, and investigate how socio-cognitive factors play a part in these relationships. The results show that socio-cognitive interactions between knowledge senders and receivers play an important contributing factor towards effective knowledge transfer, and can also act as an important intervening variable in the relationship between knowledge characteristic and knowledge transfer, as well as the relationship between organisation culture and knowledge transfer.

Keywords: Organisational learning, knowledge management or transfer, organisational culture, organisational effectiveness