Abstract: This paper outlines the importance of knowledge in multinational firms. In particular, the transfer of tacit knowledge, which cannot be codified, has been argued to be a key source of competitive advantage in multinational firms. A review of the extent of research on knowledge transfer highlights the lack of attention paid to organisational characteristics. Contextual features such as organisational culture, employee travel, communication practices, and training and development programs have been identified as important factors in the facilitation of tacit knowledge transfer, but little has been done to explore how these are utilised in practice. A qualitative case study will supplement existing quantitative arm’s-length empirical work, allowing organisational context and practices to be explored.
INTRODUCTION

The importance of knowledge transfer within multinational enterprises (MNEs) has been widely acknowledged in recent years. Globalisation, the integration of rational markets, has enabled MNEs to increase their efficiency and innovation by disseminating skills and solutions between geographic locations and organisational levels. This dissemination, referred to in this paper as knowledge transfer, allows firms to best exploit economies of scale and scope in knowledge assets. In particular, tacit knowledge is a firm specific asset that is difficult for competitors to imitate. MNEs that can transfer tacit knowledge throughout their operations correspondingly hold a significant competitive advantage over competitors.

This study examines the dissemination of tacit knowledge in MNEs by exploring the context through which the efficiency of internal tacit knowledge transfer is enhanced. The motivation for knowledge transfer will then be explained with reference to the theory of the firm. In particular, emerging Knowledge-based Theories of the firm are employed to explore the facilitation of knowledge transfer in MNEs. A brief literature review will highlight the need for an investigation into organisational context, and for the use of a qualitative, face-to-face research instrument. The proposed methodology builds existing constructs from the literature into flexible, semi-structured interviews. Finally, expectations and limitations will be discussed.

KNOWLEDGE

Knowledge at its simplest refers to understanding. It describes the way in which the world is viewed and understood, with reference to beliefs and commitment, actions, and meaning (Nonaka and Takeuchi, 1995). Such understanding is attained through learning, which often comes from experience. Organisational learning, in particular, refers to adaptation or internal readjustment, based on prior experience (Cyert and March, 1963). This means that knowledge is cumulative and path-dependent, augmented and adjusted by new experiences, reflecting what has been learnt from past views and experiences of the world. As a result, knowledge is highly contextual and specific to the unit by which it is possessed.

Some authors claim that knowledge can only be held by individuals (Simon, 1991). This view presents a problem for firms, as employee turnover would result in the loss of potentially critical and valuable knowledge. However, it has been observed that learning has been operationalised at each of four levels – the individual, the group, the organisation and the population (Miner and Mezias, 1996; Walsh, 1995). This explains how firms can be greater than the sum of their parts; how an organisation may know more than the sum of what is known by its individual members (Senge, 1990). Knowledge can thus be transferred between levels, particularly from the individual to the group and organisational levels. Only in this way can a firm prevent knowledge from being lost through employee turnover.

Knowledge is encapsulated within routines, which become the vessel for its transfer. Routines are repetitious behavioural patterns that encompass knowledge learnt through previous experiences (Nelson and Winter, 1982). For example, a successful solution to a problem that is repeated whenever that problem is faced constitutes a routine. If several members of an organisation understand a routine, it exists at a level
higher than the individual and the knowledge it encapsulates will not be lost if the employee, who regularly performs the action, leaves the firm.

**TACIT KNOWLEDGE**

Knowledge is often classified along a spectrum from tacit to explicit, as the defining characteristics of different types of knowledge. Explicit knowledge can be easily transferred in written form and, thus, does not provide significant competitive advantage to a firm, as it can easily be obtained and imitated by competitors. Tacit knowledge, however, is difficult to codify, or capture in written form. Polanyi (1966:4) first identified tacit knowledge when he observed that “we can know more than we can tell”.

An important implication of the resistance of tacit knowledge to codification is the difficulty that this creates for its transfer (Subramaniam and Venkatraman, 2001). This feature has been labelled the ‘stickiness’ of tacit knowledge (Szulanski, 1996). While stickiness does produce certain difficulties for transfer within a firm that are the subject of this study, it also makes tacit knowledge an important source of competitive advantage. Given both the context-specific nature of knowledge learned from previous experience and the problems of completely codifying tacit knowledge, it is extremely difficult for competitors to imitate tacit knowledge. Competitors are largely unable to replicate solutions and innovations that include high levels of tacit knowledge. Yet, the very characteristics that render tacit knowledge a valuable source of competitive advantage also present firms operating across borders with distinct organisational challenges. Within the international business literature, there are two distinct, but complementary, schools of thought that identify the ability to transfer such tacit knowledge as an important source of competitive advantage.

**KNOWLEDGE AND THEORIES OF THE FIRM**

Recently, the knowledge-related concepts from both transaction cost economics and the resource-based view have been integrated and expanded in an effort to develop a knowledge-based view of the firm (Grant, 1996; Kogut and Zander, 1993; Spender, 1996). While this view is still in its infancy and does not fully explain the existence and role of the firm, it does highlight some of the key characteristics of the firm, such as how they enable tacit knowledge transfer.

Transaction cost economics explains firms as organisations that internalise transactions to overcome market inefficiencies. Kogut and Zander (1992) applied the theoretical framework to knowledge transactions, arguing that firms transfer knowledge more efficiently than markets do, for two key reasons. First, markets for knowledge are inefficient due to an inability to accurately determine a price (Casson, 1982). In order to evaluate knowledge, it must be fully understood, at which time it no longer needs to be bought. Internalising knowledge transactions eradicates the need to determine the value of knowledge. Second, knowledge transfer, and particularly tacit knowledge transfer, requires transaction-specific investments (Grant, 1996). Transaction-specific investments, made specifically for one transaction, are subject to hold-up, placing the firm in a position where it is dependent upon an external party. Internalising tacit knowledge transactions avoids the potential loss if these investments are held up. Under transaction cost economics, firms transfer tacit
knowledge internally so as to overcome market inefficiencies and avoid hold-up. This will be a source of advantage against competitors who fail to internalise such transactions, or are less efficient at internal knowledge transfer.

The resource-based view regards the firm as a bundle of resources and capabilities. Resources are firm-specific assets, both tangible and intangible, that can be used to create value for the firm. Knowledge can be classified as a resource, as it can be used to solve problems, or to increase production efficiency and, thus, can create value for the firm. Capabilities are high-level routines, or collections thereof (Winter, 2000); they are behavioural patterns that encompass knowledge from previous experiences and are used to leverage the firm’s resources in order to create value. As such, knowledge is both a resource to be exploited and a key factor in the capabilities that govern this exploitation. Differences in each firm’s knowledge base will result in differences in their resources and capabilities. Therefore, knowledge is a source of firm heterogeneity and a key component in value creation under the resource-based view of the firm.

The knowledge-based view of the firm, which combines transaction cost and resource-based approaches, is underpinned by a sense of the firm as a social community (Grant, 1996; Kogut and Zander, 1993; Spender, 1996). The firm is established as a social community by linking members through shared experiences (Nelson and Winter, 1982). This creates a basic level of shared understanding or collective knowledge within the firm (Kogut and Zander, 1995; Spender, 1996; Walsh and Ungson, 1991). Senge (1990) described the establishment of a social community through the achievement of five ‘disciplines’ to enable effective knowledge transfer. These include building a ‘shared vision’ of goals, values and missions, combined with a conception of the firm as a system that is greater than the sum of its parts. Similarly, Nonaka and Takeuchi (1995:62) describe the process of sharing tacit knowledge through the process of socialisation, defined as “sharing experiences and thereby creating… shared mental models”. A social community, based on shared knowledge and common experiences, is the defining characteristic of the firm under the knowledge-based view.

This social community plays a key role in enhancing the efficiency of knowledge transfer. Employees, who have encountered similar previous experiences, will be able to communicate new tacit knowledge, owing to its basis in previous experience. Furthermore, values, beliefs and aims such as those promoted by the firm will provide a common context in which employees can understand new tacit knowledge. The ability to evaluate and apply new knowledge is known as absorptive capacity, and has been found to be a function of previous experience, or prior related knowledge (Cohen and Levinthal, 1990). As such, a firm that consists of a social community of shared knowledge and experiences will have a higher absorptive capacity than a competitor that is not bound by social ties. Employees with similar understandings of the firm’s existing goals and values, as well as operational knowledge, will be able to effectively communicate this knowledge among themselves.

The establishment of a social community within a firm is of particular importance for multinationals transferring knowledge across international borders. Such borders differentiate social communities of their own, characterised by different nationalities, religions, languages, and cultures. These communities have associated values and
beliefs, which result from the experiences that their members share. The firm must, therefore, create similar backgrounds or operating environments in their different international locations, so as to enable efficient communication between employees with contrasting personal backgrounds (Kogut and Zander, 1993). Nonaka and Takeuchi (1995) argued that this can be achieved through an extended socialisation process, which will allow trust to be established between geographically- and culturally-distant employees. If a firm can build a high level of shared knowledge amongst its employees, regardless of the other social communities to which they belong, it will raise its absorptive capacity.

To summarise, tacit knowledge is an understanding that arises from previous experiences, which cannot be transferred through written means. As such it is difficult for competitors to comprehend and imitate, making it a source of competitive advantage. This advantage must then be transferred throughout the firm to avoid market inefficiencies and hold-up on transaction-specific investments, and also to transfer value-creating capabilities. The social community that exists between employees, who share similar experiences and subscribe to the same organisational goals and values, helps to enable this transfer. This study will explore how firms create and sustain this community in practice, and more generally how firms achieve the dissemination of tacit knowledge across international borders. A review of empirical studies of knowledge transfer to date provides a framework for possible areas of investigation.

EMPIRICAL STUDIES TO DATE

In the mid-1990s the need for more empirical studies into knowledge transfer was expressed (Miner and Mezias, 1996; Walsh, 1995). This call has been answered with a number of studies published in the last three years focussing on aspects of knowledge transfer within firms. Few, however, have considered context or the organisational role in this transfer. Szulanski (1996) conducted the most comprehensive of these studies, looking at a number of factors that inhibit tacit knowledge transfer. These included characteristics of the knowledge being transferred, of the people involved in the transfer (the source and the recipient), and of the context in which transfer takes place. Factors, thus far identified as relating to context by Szulanski (1996) and others, are communication and normative integration among employees. Other factors that may be subject to direct influence by the firm include training and development, knowing and access, and motivation and feedback. The following section provides a brief explanation of findings to date regarding each of these factors, outlining the present state of research into the organisational context and tacit knowledge transfer.

COMMUNICATION

The use of different international communication strategies, including travel and secondments, to improve tacit knowledge transfer have been studied by a number of authors (Ghoshal and Bartlett, 1988; Minbaeva et al, 2003; Subramanium and Venkatraman, 2001; Szulanski, 1996; van Zolingen et al, 2001). It has been found that internal communication is a highly significant determinant of knowledge dissemination (Ghoshal and Bartlett, 1988; Minbaeva et al, 2003). Similarly, difficulties in communication and collaboration among employees have been found to
be an important barrier to knowledge transfer (Szulanski, 1996). Furthermore, the use of cross-national teams (which require both international travel and communication) and the frequency of communication among team members have been found to increase the level of tacitness in knowledge transferred during projects (Subramaniam and Venkatraman, 2001). The level of communication and, in particular, face-to-face communication enabled by travel, clearly has an effect on the ability of firms to transfer tacit knowledge.

NORMATIVE INTEGRATION

Normative integration refers to the extent to which a social community exists within a firm. Bartlett and Ghoshal (1988, 1994) defined it as shared strategies, goals, meanings and values, a shared identity, and found it to be a significant factor in knowledge transfer. The development of organisational culture to achieve the synchronisation of individual identity with firm goals and values and to promote the establishment of a social community has been recognised by a number of authors (Inkpen and Dinur, 1998; Lahti and Beyerlein, 2000; van Zolingen et al, 2001). The extent to which individuals and work groups are normatively integrated into the firm will affect the firm’s ability to transfer tacit knowledge, as explained by the knowledge-based view of the firm.

However, research into how organisational management practices can be used to increase and improve tacit knowledge transfer has been minimal. This may be due to the difficulty of isolating and measuring such subjective, human variables as normative integration. Nonetheless, this task must be tackled in order to provide a valuable insight for managers striving for best practice in knowledge transfer.

Surprisingly, research thus far has neglected the role of social interactions among employees in normative integration and knowledge transfer. It is thought that the frequency and nature of social interaction, beyond communication for work purposes, may have an impact on the working relationships between employees and on the goals and values that they share. This includes social functions sponsored by the firm and thus reflecting organisational culture and values, and more informal relations which may arise from the organisational ethos. Data regarding social employee relationships will be collected during this study and analysed for its effect on tacit knowledge transfer.

Other factors found to enhance knowledge transfer that may be influenced by organisational practices are the training and development opportunities available to employees, the extent to which employees know and have access to knowledge possessed by other employees, and the motivation levels of employees.

TRAINING AND DEVELOPMENT

The firm can improve knowledge transfer by increasing the absorptive capacity of employees (Minbaeva et al, 2003; Szulanski, 1996). Good training and development programs will ensure that employees are equipped with the necessary background knowledge before entering any given situation. In particular, learning by observation has been found to be the most effective way of learning tacit knowledge (Nadler et al, 2003). As such, firms providing relevant training and development opportunities,
including observing more senior employees at work, will maximise their ability to transfer tacit knowledge.

KNOWING AND ACCESS

Studies have shown that two of the most important features, for tacit knowledge transfer, of a relationship between employees are ‘knowing’ and ‘access’ (Borgatti and Cross, 2003; Cross et al, 2001). Relationships that are effective in knowledge transfer start with one employee ‘knowing’ where the other employee’s areas of expertise are concentrated. In addition, one employee must have timely ‘access’ to the other employee. Similarly, Szulanski (1996) included measures of knowing who could best exploit new knowledge and who could help to solve problems as part of his absorptive capacity construct. Organisations can implement strategies to ensure that employees are made aware of the range of expertise within their own firm. Organisational structure and culture can also affect the ability of employees to access employees in other departments, foreign countries, or on different hierarchical levels.

MOTIVATION AND FEEDBACK

Knowledge transfer can motivate employees both positively and negatively. Some employees regard knowledge sharing as a reciprocal arrangement, whereby they will gain new knowledge if they share their existing knowledge with colleagues. Others, however, fear that they will lose their value to the firm if they share knowledge with their colleagues (van Zolingen et al, 2001). Overall, however, it has been found that performance appraisals and other forms of feedback improve employee motivation and increase the willingness of employees to transfer knowledge (Ghoshal and Bartlett, 1994; Lahti and Beyerlein, 2000; Minbaeva et al, 2003). As such, the effective provision of feedback and suitable motivating incentives are practices that firms can implement to promote knowledge transfer.

METHODOLOGY

Studies to date have uncovered a number of factors, affecting tacit knowledge transfer, which can be influenced by organisational practices. However, these have not been explored in depth due to the methodologies employed. The majority of studies have used surveys and questionnaires, research instruments that operate at arm’s-length from the subject, on a large sample of diverse companies. While this has allowed a description of the broad pattern of tacit knowledge transfer practices, it has failed to provide a deeper level of understanding of the social community within the firm, and the strategies employed to improve tacit knowledge transfer (Minbaeva et al, 2003; Subramaniam and Venkatraman, 2001).

The proposed study, therefore, adopts a case study method in order to meet a number of goals. First, data regarding the social relationships formed among employees will be collected and incorporated into the analysis of knowledge transfer practices. Second, personal interviews will provide the means to gain a deeper level of understanding of the social community within the firm, to observe its operation rather than simply speculate on its existence. Third, organisational strategies employed to improve tacit knowledge transfer will be examined from both the employee and the management perspectives, in order to gauge their effectiveness. Fourth, a case study
will shift the focus from trends across organisations to specific firm-level strategies. As such, it is expected that the results of this study may lead towards an understanding of tacit knowledge transfer practices that will be useful for firms seeking to improve their performance in this area.

The proposed methodology includes some documentary research in order to identify areas of interest within the targeted firm, and to gain an overall impression of performance and espoused organisational culture. Interviews are then proposed with both employees and their managers. A structured interview design will ensure that results are comparable, while the flexibility to examine firm- and team-specific processes and personal experiences is maintained. Interviews have been designed according to the factors identified in previous studies, and focus on interactions between employees from offices in different countries. As such, employees will be asked to provide information relating to:

- the travel they have undertaken for work purposes
- their communication with other employees
- the training and development programs they participate in
- the extent to which they interact with colleagues beyond their immediate work situation for work purposes
- their perception of the organisational culture of the firm
- the extent to which they socialise with colleagues

Similar questions will be posed to human resource managers responsible for international assignments and secondments, and for promoting organisational culture.

The sampling of companies will be based largely on gaining access. Business consulting firms are likely to be targeted due to the knowledge intensity of the industry. It is likely that internal case studies will arise, based on different projects about which knowledge is transmitted throughout the firm, or on the different units within the firm. Sampling of individuals will be guided by the snowballing method, based on their participation in such projects. Individuals interviewed must be accessible and have travelled to foreign offices for work purposes. Human resource managers responsible for international assignments and secondments will also be asked to participate.

CONCLUDING REMARKS

Due to the time limitations of the Honours year, it is unlikely that a second case study for comparative purposes will be possible. This would have been useful in order to begin to evaluate knowledge transfer in practice. Nonetheless, a single case study will provide an informative starting-point for other firms to compare themselves, and to provide a greater understanding of how firms can promote the dissemination of tacit knowledge, particularly across international borders. In addition, internal comparison between units or projects will be possible.

A second limitation is that no measurement system for the appraisal of knowledge transfer has yet been constructed. As such, this study must be restricted to exploration and description, without evaluation. The development of an appraisal system is well beyond the scope of this study, however data gathered for this case study could provide a useful starting point for its construction in the future. Nonetheless, the
exploration and description of a case study will offer a valuable point of comparison for other firms.

In spite of these limitations, this study will provide a detailed exploration of how firms promote the dissemination of tacit knowledge throughout their international operations, a key source of competitive advantage. In particular, the role of normative integration and the establishment of a social community in tacit knowledge transfer will be examined. The findings will be grounded in practice, making them useful to other firms seeking to improve their performance in this area. This study will supplement existing research in this area, providing detailed analysis of a single case rather than overall trends, and will consider social interactions between employees.
REFERENCES:


