



# The speed of knowledge transfer within multinational enterprises: the role of social capital

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## Abstract

**Purpose** – The success of knowledge transfer very much depends on a company's ability to effectively manage their knowledge transfer process. The purpose of this paper is to argue that a critical component in understanding knowledge transfer in the international arena is the speed of that knowledge transfer (and those factors that influence that speed) within a multinational enterprise (MNE).

**Design/methodology/approach** – In this paper, social capital theory is used to argue that social capital is related to the speed of knowledge transfer within an MNE. The three dimensions of social capital, i.e. relational, dimensional, and cognitive, facilitate the transfer process and effect the rapidity of technology transfer.

**Findings** – The role of knowledge transfer speed in MNEs knowledge management has been neglected and, yet, the speed of knowledge transfer is critical for MNE organizations to build or maintain their competitive advantage. A critical component in understanding knowledge transfer in the international arena is the speed of that knowledge transfer (and those factors that influence that speed) between different units.

**Originality/value** – This study examines social capital to better understand knowledge management at the intra-firm level of an MNE. The success of knowledge transfer very much depends on a company's ability to effectively manage that knowledge transfer process. Using social capital theory, we argued that the three dimensions of social capital (relational, dimensional, and cognitive) are related to the speed of knowledge transfer from the parent company to the foreign subsidiary.

**Keywords** Knowledge transfer, Social capital, Multinational companies

**Paper type** Conceptual paper



## 1. Introduction

An organization's ability to maintain superior performance, according to strategic management scholars (Porter, 1985; Powell, 2002), is dependent on its ability to obtain competitive advantage. Proponents of knowledge-based view argue that of all possible resources, a firm's knowledge base has the greatest ability to serve as a source of sustainable differentiation and, hence, competitive advantage (Grant, 1996; Gupta and Govindarajan, 2001a, b; Kogut and Zander, 1992; Nonaka, 1994). Winners in the highly competitive market place, according to Nonaka and Takeuchi (1995), will be differentiated based on their ability to manage knowledge. Therefore, it is important for firms to utilize and manage their knowledge effectively (Davenport and Prusak, 1998).

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Causal linkage of knowledge management to organizational competitive advantage and performance has led to increased attention being devoted to this stream of research. The inter- and intra-firm management of knowledge has been the subject of numerous articles published in the field of management (Child and Rodrigues, 1996; Ensign, 1999; Kedia and Bhagat, 1988). A stream of research in this area has focused on the process of knowledge transfer across national borders. In multinational enterprises (MNEs), the value of intra-firm knowledge transfer can become especially critical as foreign markets often provide access to new ideas and stimuli to refresh the organization's knowledge bank and that can be subsequently applied in subsidiaries located in other countries (Ghoshal and Bartlett, 1988). Hence, the ability to transfer and deploy knowledge across borders has become especially important for firms trying to benefit from opportunities available outside their national boundaries.

Previous investigations of knowledge transfer within the MNE have focused on knowledge flows between the headquarters and its subsidiaries. These studies see the MNE predominantly as a social unit that creates and internally distributes knowledge (Makino and Delios, 1996). Within the social unit, collective learning occurs across the subsidiary units that are responding/adapting to diverse environmental pressures (Isobe *et al.*, 2000). Knowledge transfer has been viewed largely as either an administrative control or a formal/informal coordination mechanism (Gupta and Govindarajan, 1991; Nobel and Birkinshaw, 1998). However, the role of the speed of knowledge transfer in the realm of knowledge management in MNEs has been neglected.

The possession of proprietary, advantaged knowledge is a source of competitive advantage for a firm (Isobe *et al.*, 2000; D'Aveni, 1994). Wernerfelt (1984) and Dierickx and Cool (1985) postulate that a firm's competitive advantage depends on how quickly and how efficiently a firm can develop or acquire inimitable knowledge. Competitive pressures require MNEs to develop their capabilities for replicating knowledge within and across the firm faster than the similar efforts of their competitors (D'Aveni, 1994). Thus, the speed of knowledge transfer is critical for MNEs to build or maintain their competitive advantage. Consequently, an MNE that is unable to transfer new knowledge to its subsidiaries quickly risks becoming a fount of new ideas for competitors (Govindarajan and Gupta, 2001) and losing its competitive advantage. Accordingly, there should be performance consequences among firms dependent upon the speed of their knowledge transfers to their subsidiaries. However, this issue has received limited attention in research. As a result, we have an imperfect understanding of how MNEs manage this transfer effectively, especially in terms of the speed of transfer.

The transfer of knowledge between a firm's units is difficult (Nonaka, 1994) because knowledge is embedded in corporate routines, standard operating procedures, and in the technology itself, which constitute the sources of tacit knowledge that can provide competitive advantage for a firm (Birkinshaw *et al.*, 2002; Huber, 1991; Pinch and Bijker, 1987). The foreign subsidiary's geographic distance and distinct cultural differences magnify the problem encountered in transferring knowledge across the breadth of the MNE's organizational structure. The developments in social capital literature therefore could be beneficial in overcoming this deficiency and developing a framework that addresses the complexity of the transfer process. Previous research has not provided guidance about the role of social capital in the speed of knowledge transfer between the subsidiaries within an MNE. Therefore, in this study, we will link social capital embedded in

the relationship of a subsidiary unit with other units within an MNE to the speed of knowledge transfer between those units.

In developing this research framework, we will start with a brief review of relevant knowledge transfer and social capital literature. Then we will provide our theoretical arguments and propositions followed by contributions and conclusions of this research.

## 2. Social capital

The term “social capital” initially appeared in community studies (Jacobs, 1965). Jacobs (1965) study suggested that social capital is critical for survival and functioning of city neighborhoods. This is because social capital facilitates the development of a strong network of cross cutting personal relationships over time. This network then forms the basis for trust, cooperation, and collective action in city neighborhood communities (Jacobs, 1965). Coleman (1988, p. S98), an American Sociologist, developed the concept further though his definition was more vague as he stated social capital is:

[...] a variety of entities with two elements in common: They all consist of some aspect of social structures, and they facilitate certain action of actors – whether persons or corporate actors – within the structure.

As the concept of social capital has been further refined within the literature, conceptual consensus has developed that social capital represents the ability of actors to obtain benefits by virtue of membership in various social structures (Portes, 1998). The central argument of social capital theory is that the networks of relationships constitute a valuable resource for the conduct of social affairs thereby providing their members with “the collectivity-owned capital, a credential” (Bourdieu, 1986, p. 249) which entitles them to credit in the various senses of the word.

Acknowledging social capital may take many forms, and management theorists generally accept Coleman’s thesis that each of these forms has two universal characteristics. First, social capital constitutes some aspect of the social structure. Second, it facilitates the actions of individuals within the structure (Nahapiet and Ghoshal, 1998). Nahapiet and Ghoshal (1998) define social capital as the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit. They also argued that for increased utility, it is useful to divide facets of social capital into three clusters. The three clusters of social capital are: the structural dimension, the relational dimension, and the cognitive dimension.

Social capital’s structural dimension is concerned with the overall pattern of connections between actors; that is, who you influence and how you influence them. The relational dimension refers to the type of personal relationship people have fostered with each other through a history of interactions. This dimension focuses on the particular relations people have, such as respect, trust, and friendship, that influence their behavior toward the other individual. It is through these ongoing personal relationships that people fulfill such social motives as sociability, approval, and prestige. Finally, the cognitive dimension refers to those resources providing shared representations, interpretations, and system of meaning among parties such as cultural and societal norms (Nahapiet and Ghoshal, 1998).

## 3. Knowledge transfer

A review of literature in the knowledge transfer arena traces the origin of the field to studies on choices of international technology transfer modes (Hall and Johnson, 1970;

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Mansfield *et al.*, 1979; Teece, 1976). Technology transfer, being a manifestation of knowledge transfer, is the transmission of knowledge that enables the recipient firm to manufacture a certain product or provide a particular service (Tsang, 1997). Hence, Hall and Johnson (1970) argued that technology – as an abstraction – cannot move as people and other tangible items are transferred.

There are many competing definitions of knowledge transfer. For example, Zander (1991), while defining transfer, suggests that the transfer should result in the receiving unit accumulating or assimilating new knowledge. The knowledge transfer thus implies a successful transfer of knowledge, which is a markedly higher criterion to achieve than the exposure of a foreign unit to new information from the subsidiary's parent corporation. For the present research, we will adopt Zander and Kogut's (1995) definition of knowledge transfer as it seems most appropriate in this context. Zander and Kogut (1995) defined the successful transfer of knowledge as a transfer that results in the receiving unit implementing new techniques of production. These transferred technological capabilities can be used and economically exploited in the marketplace. Transferred knowledge can reside in design, production, installation, sales and distribution, operation and maintenance, or management.

Chang (1985) identified two means through which firms may learn:

- (1) experience; and
- (2) from other firms.

Makino and Delios argued that, in the context of the MNE, there is a third way – from other bodies with which there are strong connections to the same firm (i.e. the corporate headquarters). We expand the definition even further to argue that learning can also occur across subsidiaries of the MNE outside of their relationship with corporate headquarters.

Kogut and Zander (1992, 1993) argued that the efficiency of knowledge transfer within an organization varies depending upon the degree that the knowledge is tacit. Szulanski (1996), studying “internal stickiness” which creates impediments to internal knowledge transfers, noted that internal knowledge transfer was significantly constrained by the recipient's (i.e. subsidiary unit's) lack of absorptive capacity, causal ambiguity, and an arduous relationship between the source and the recipient. This suggests that internal knowledge transfer is not always quick or efficient and easily may result in a slowing down of the ability to exploit a competitive advantage by a subsidiary. The embeddedness of knowledge in an organization's people and groups creates a hindrance and makes the transfer process increasingly more complex (Polanyi, 1969) than the transfer of tangible resources between organizational units, especially units separated by cultural, geographic, and national boundaries. The success of knowledge transfer very much depends on a company's ability to effectively manage that knowledge transfer process. Though the field of knowledge transfer has experienced extensive investigation, Zander and Kogut (1995) are among the few researchers who have examined the speed of knowledge transfer within this context. In their study, they found that the degree of codification and how easily capabilities could be taught contributed significantly to the speed of the transfer process. The capability to increase an organization's speed of international transfer of a critical knowledge is therefore of fundamental significance for an MNE's operations and can prove to be highly beneficial in new markets.

The speed of internal knowledge transfer stimulates subsidiary performance not because the transfer itself incurs costs but because a slow transfer deters the firm's

timely application of the knowledge to commercial ends in a market place (Isobe *et al.*, 2000). The more rapid the knowledge transfer, the more likely a subsidiary unit is to gain first-mover advantages. First-movers gain a competitive edge by preempting rivals in moving down learning curves, acquiring scarce resources, and developing an anomalous local network (D'Aveni, 1994; Lieberman and Montgomery, 1988). When an investment is considered important, an MNE may have a stronger incentive to quicken its transfer to a subsidiary unit in order to garner first-mover advantages in the market.

In the next section, we conceptualize how social capital can speed the transfer of knowledge within MNEs.

#### **4. Social capital in knowledge transfer**

The processes of transferring knowledge are commonly associated with major changes at the recipient unit, such as the breakup of existing routines and/or changes in the organizational culture (Kostova, 1999). The complexity of the process requires recipients to devote substantial resources to assimilate, adapt, and integrate the knowledge into its existing system. Hence, knowledge transfer recipients face a high degree of uncertainty and risk as they attempt to incorporate the knowledge conveyed from other units into their own processes. This is especially true when the transferred knowledge is new. As a result, the successful accomplishment of knowledge transfer not only requires substantial time and effort but also strong motivation from important decision makers and key players on the recipient's side. As noted previously, Szulanski (1996) suggested that information "stickiness" – the difficulty and costliness of acquiring, transferring, and using knowledge – increases when there is a lack of motivation on behalf of the recipient, a lack of perceived reliability of the source (i.e. trust), and/or an arduous relationship between the recipient and the resources of knowledge. We argue that the relationship between the recipient and the source of knowledge is critical in the transfer process (Bresman *et al.*, 1990; Ghoshal and Bartlett, 1988). A successful knowledge transfer needs the active participation of not only the transferor but also the recipient. Therefore, the transfer of knowledge across different units within an organization in which pre-existing relationships among units are absent is more susceptible to information stickiness.

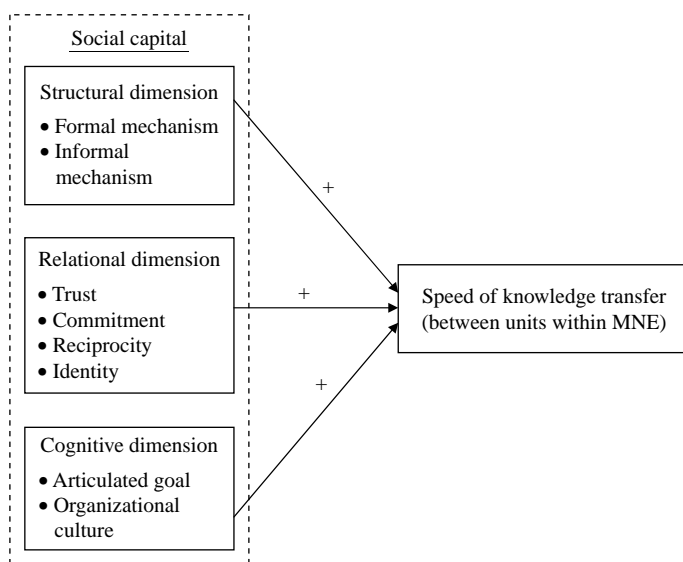
Previous research has suggested the importance of the relationship between the source and the receiver of knowledge. These studies using social capital theory have focused on inter-organizational relationships that a firm forms with external stakeholders such as customers, suppliers, investors, and government institutions (Yli-Renko *et al.*, 2001). Taking a similar position, Kogut and Zander (1992) suggested that knowledge transfer is a predominantly social process. They argued that to understand the speed and efficiency of the knowledge creation and transfer process in an organization, it is important first to understand the social community and structure present in it (Kogut and Zander, 1992). An MNE that has harmonious relationships with its subsidiaries is more likely to engage in inter-unit resource exchanges and social interactions because of the previously established trust between the headquarters and its subsidiaries (Ghoshal and Bartlett, 1988, 1994; Tsai and Ghoshal, 1998). Similarly, Yli-Renko *et al.* (2001) argued that the extent to which a firm can use external relationships for knowledge acquisition is contingent on the amount of social capital embedded in such relationships. Therefore, through close social interactions involving either internal or external interactions, firms are able to increase the depth, breadth,

and efficiency of their mutual knowledge exchanges (Ghoshal and Bartlett, 1988; Lane and Lubatkin, 1998). Consequently, in the present research, we utilize social capital theory to explain how it influences the speed of knowledge transfer between units within an MNE and argue that social capital plays a critical role in influencing the speed of knowledge transfer within an MNE. Specifically, we focus on knowledge flows from peer subsidiary units and examine how social capital dynamics between different foreign subsidiary units influence the speed of knowledge transfer.

Complexities associated with the transfer of knowledge across national borders are difficult to resolve. These complexities arise due to differences in the technological infrastructure, the level of economic development, cultural differences, attitudinal differences between home and host countries, and different languages. These complexities may contribute to conflict and cultural misunderstanding, which can hinder the flow of knowledge and learning between different foreign subsidiaries within the MNE (Fiol and Lyles, 1985; Lane and Beamish, 1990; Parkhe, 1993). When an MNE faces such complexities, social capital (i.e. structural, relational, and cognitive) resident in an MNE may allow them to tap into the knowledge resources for exchanges among its internal constituents. The higher social capital among its internal constituents may allow a unit to speed the transfer of knowledge. Hereafter, the development of our arguments is based on the conceptual model shown in Figure 1.

#### 4.1 Structural dimension

The structural dimension of social capital in the case of an MNE is the network of internal constituents or actors. This network basically forms the transmission channel that can be used in the transmission of knowledge between MNE constituents such as between headquarters and its subsidiaries. The structural dimension that forms the transmission channels in case of organizations can be both formal (formal integrative mechanisms) and informal (corporate socialization mechanisms) (Gupta and Govindarajan, 2001a, b).



**Figure 1.**  
Social capital's influence  
on the speed of knowledge  
transfer within the MNE



Gupta and Govindarajan (2001a, b) identified liaison positions, task forces, and permanent committees as some of the key formal structural mechanisms for integrating multiple units of an organization. In an organization, an informal transmission channel is built through interpersonal familiarity, personal affinity, and convergence in cognitive maps among personnel from different subsidiaries (Edstrom and Galbraith, 1977).

Ghoshal and Bartlett (1988) argued that a high degree of organization socialization achieved through extensive travel and transfer of managers between the headquarters and the subsidiary, and the formation of joint working teams, task forces, and committees resulted in a strong integration of the subsidiary into the parent company. Studying the diffusion of technology from a parent to subsidiary unit, Ghoshal and Bartlett noted that an integrated subsidiary that possessed the same overall strategy, goals, and values with its parent organization enjoyed higher knowledge diffusion. Supporting the benefits of integration for knowledge transfer, Hakason and Nobel (2001) additionally argued that the intensity of the interactions with other corporate units affects the propensity of foreign subsidiaries to transfer technology to their parent organizations.

A consequence of intensifying the information exchange through such formal and informal integrative mechanisms is the social interaction among its internal constituents that will increase relation-specific common knowledge (Yli-Renko *et al.*, 2001). This common knowledge increases the relation specific absorptive capacity as a firm's ability to absorb new knowledge is dependent on its possession of prior, related knowledge (Cohen and Levinthal, 1990). Because the ability of each dyad member (i.e. the headquarters unit and a subsidiary unit, the subsidiary and another subsidiary unit) to absorb the communicated knowledge is enhanced through repeated social interaction, both parties have a relatively greater incentive to invest even more in knowledge transfer routines. By intensifying knowledge transfer activities, social interaction serves to increase the relative capacity and effectiveness. Also, social interactions develop over time in dyadic relationships as exchange partners become comfortable with each other's competence and reliability in economic exchange. In turn, the more social interaction builds, the greater the intensity, frequency, and breadth of information exchanged (Lane and Lubatkin, 1998). As the intensity, frequency, and breadth of information exchange increases, there is a concomitant decrease in the learning curve; therefore, the time required to transfer the knowledge becomes shorter.

A transfer of knowledge, especially when the knowledge to be transferred has a tacit component, may require numerous individual exchanges (Nonaka, 1994). Because tacit information is difficult to codify and transfer, assimilating such information effectively requires the use of rich information-processing mechanism (Subramaniam *et al.*, 1998). The number and level of formal and informal integrative mechanisms may be more relevant when an MNE has to deal with the geographic distance and distinct cultural differences between different units. The success of each such exchange depends to a certain extent on the ease of communication and on the intimacy of the overall relationship between the source unit and the recipient unit (Cubillo-Pinilla, 2008; Gupta and Govindarajan, 2001a, b). Therefore, we propose:

- P1a.* The higher the number and level of formal integrative mechanisms between MNE units, the faster is the speed of knowledge transfer between MNE units.
- P1b.* The higher the number and level of informal integrative mechanisms between MNE units, the faster is the speed of knowledge transfer between MNE units.

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#### 4.2 Relational dimension

Network theorists argue that individual actions can be explained partly by their relational embeddedness (Granovetter, 1992). The construct of relational embeddedness refers to the detail that “economic action and outcomes, like all social action and outcomes, are affected by actors’ dyadic (pairwise) relations and by the structure of the overall network of relations” (Granovetter, 1992, p. 33). For example, past relationships between individuals will influence their current actions. As Zander (1991) noted, the receiving organization normally has to dedicate significant resources to assimilate, adapt, and improve upon the received knowledge for that knowledge to be useful within its own organizational structure. Modification and further development of the knowledge are thus very often an integrated part of the transfer. Therefore, the motivation of the recipient unit to engage in the transfer process is affected by the quality of its relationship with the source unit. Four components of a relationship exist in the present context and are: trust, reciprocity between the units, commitment to the parent company, and identity with the parent company. The relationships between the units will affect the motivation of the transferee to engage in the transfer process and are especially salient when the direct value of the knowledge that is being transferred is difficult to assess, such as in the case of the transfer of new management know-how or technology.

##### 4.2.1 Trust. Trust is defined as:

[...] a common belief among the units that the other unit (1) makes good faith efforts to behave in accordance with any commitments, both explicit or implicit; (2) is honest in whatever discussions precede such commitments; and (3) does not take excessive advantage of the recipient unit, even when the opportunity is available (Kostova, 1999, pp. 318-19).

High levels of trust will likely reduce the uncertainty regarding the value of the knowledge for the recipient unit, as well as the motives behind the transfer.

Trust permits access to resources and a willingness to resolve issues through mutual problem solving (Uzzi, 1997). It facilitates knowledge transfer by creating a sense of security. There is a commitment by the partners not to take advantage of the others party’s weaknesses (Govindarajan and Gupta, 2001; Steensma and Lyles, 2000). As Lane *et al.* (2001, p. 1141) noted, “trust functions as an ongoing social control mechanism and risk reduction device. It influences both the extent of knowledge exchanged [...] and the efficiency with which it is exchanged”.

Additionally, higher trust has been found to be associated with a higher perceived reliability (Szulanski, 1996) and competence (Ghoshal and Bartlett, 1994) of the source and has been shown to positively influence transfer success (Bartlett and Ghoshal, 1988). Dhanaraj *et al.* (2004) argued that managers’ mental models built on past experiences yielded effective guideposts and integrating mechanisms for interpreting new knowledge. These organizational capabilities, thus, should reduce the need for clarification, control, and motivation. Hence, an MNE unit can reduce the time of communication, negotiation, and exchange associated with a transfer process between different units through the development of a mutually derived trust relationship. Therefore, we predict:

*P2a.* The higher the level of trust the recipient unit has in the source unit, the faster is the speed of knowledge transfer from the source unit to the recipient unit.

4.2.2 Reciprocity. Knowledge is a valuable resource so that generating and providing it to others can entail significant costs. It is likely that the parties involved in the knowledge



exchange calculate the costs and benefits associated with such exchanges and expect that the exchanges will be balanced and fair. Research on procedural justice has suggested that such expectations about fairness contribute to knowledge exchange (Kim and Mauborgne, 1991). Those who provide helpful knowledge to another unit expect reciprocation in kind from the receiving unit. Rogers and Kincaid (1981) argue that reciprocity is an integral part of effective communication because it helps to refine and shape new insights. This suggests that knowledge transferors send additional knowledge in return for knowledge received and less knowledge when their knowledge transmissions to other units are not reciprocated. The effect of such reciprocity would be that inflows of knowledge from a source are positively related to outflows of knowledge to the same source. Without such reciprocity, an organizational unit may resent not being adequately rewarded for sharing knowledge or it may be unwilling to devote time, effort, and resources to support the transfer. Consequently, when knowledge reciprocity is high, both parties should engage in the knowledge transfer process with decreasing hesitation. Also, relations based on reciprocity reduce the time spent on monitoring and bargaining over the agreement (Dyer and Singh, 1998). All else equal, less time wasted in bargaining and monitoring can mean greater time devoted to information processing and exchange. Therefore, we argue that as the level of reciprocity between units increase, shorter times will be experienced in transferring knowledge between MNE units. This preceding discussion leads to the following proposition:

*P2b.* The higher the reciprocity between units, the faster is the speed of knowledge transfer between MNE units.

*4.2.3 Commitment to parent company.* Kostova (1999, p. 318) defined commitment of a recipient unit to a parent company as:

[...] the degree to which the coalition members are willing to exert considerable effort on behalf of the parent company and have a strong desire to maintain membership in the parent company.

The arguments of commitment literature suggest that subsidiaries that are highly committed to the parent company will be more committed to any task assigned by the latter (Bartlett and Ghoshal, 1988; Mathieu and Zajac, 1990). Commitment, therefore, remains a continuous endeavor. As noted by Lyles and Salk (1996, p. 880), “knowledge acquisition is not a discrete outcome but rather an ongoing activity” – a continuous endeavor. A committed subsidiary consequently will be more willing to meet the challenges of the transfer process by providing the necessary resources and organizational support, as well as by investing the additional time and effort as needed. Thus, the transfer process will be smoother and will be less time consuming or intensive. Therefore, we propose:

*P2c.* The higher the commitment of the subsidiary to the parent company, the faster is the speed of knowledge transfer between MNE units.

*4.2.4 Identity to the parent company.* Adopting Kostova’s (1999, p. 318) definition of organizational identity in the context of transfer processes, we argue that the identity of the subsidiary unit with the parent company “reflects the degree to which the subsidiary experiences a state of attachment to and identify with the parent company”. With a higher degree of identity to the parent MNE, a subsidiary unit will feel as though it is a part of the organization and any idea originated by the parent and transferred

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to the subsidiary is legitimate. Bresman *et al.* (1990) argue that individuals would only participate willingly in a knowledge exchange once they share a sense of identity or belongingness with their colleagues. Supporting this argument Kogut and Zander (1996, p. 502) said:

[...] a firm is distinct from a market because coordination, communication, and learning are situated not only physically in locality, but also mentally in an identity [...] this shared identity does not only lower the costs of communication, but establishes explicit and tacit rules of coordination.

Since there is a self-identification with the parent organization, the recipient of a knowledge transfer will not look on the transfer as a manifestation of “not invented here” knowledge or technology to be resisted but rather will embrace the new knowledge thus speeding the adoption as it is a manifestation of a simple internal sharing of knowledge.

Consequently, the subsidiary, which identifies with the parent company will more likely share and understand the values and the beliefs of the other units within the MNE. As a result, the subsidiary will engage actively in the transfer of knowledge to their unit decreasing the time needed to integrate the new knowledge into the subsidiary’s normative practices. This leads to our next proposition:

*P2d.* The higher the identification of the subsidiary unit with the parent company, the faster is the speed of knowledge transfer between MNE units.

#### 4.3 Cognitive dimension

The cognitive dimension of social capital refers to attributes like a mutual belief or shared paradigm that promotes a common understanding of collective goals and the proper ways of acting in the social environment (Tsai and Ghoshal, 1998). As the definition refers to the goals and culture of an organization, in the present research we conceptualize the cognitive dimension as an MNE’s articulated goals and organizational culture. Ouchi (1980, p. 138) noted “Common values and beliefs provide [a] harmony of interest [...]” while Portes and Sensenbrenner (1993) argued that shared vision and goals are appropriable resources available to all members (i.e. parent and subsidiary units) of the organization that have internalized them. Organizational harmony facilitates goal and culture internalization.

*4.3.1 Articulated goals.* Researchers have argued that an articulated goal may facilitate knowledge acquisition (Nonaka and Takeuchi, 1995). This is because focusing on the same mission and goals can create the same vision or mission. Lyles and Salk (1996) suggest that articulated goals provide a mechanism for knowledge transfer. An articulated goal is critical for the transfer process within MNEs. Recently, discussion has centered on the question of local learning and innovation within MNEs. A subsidiary that is strongly embedded in the local environment has to adapt to local market needs, respond to local government demands, and hence has to pursue a multi-domestic strategy. Subsidiaries of this kind tend to have different priorities from the parent company. Thus, these subsidiaries may not share the common vision of the parent company. Having an explicit, written vision framing for the subsidiaries, the organization’s goals and plans should push the subsidiary to acquire knowledge from other units within the MNE. Additionally, the subsidiary’s internalization of the accepted goals in turn promotes actions which increase the rapidity of knowledge

transfer since the actions are perceived as contributing to preserving and promoting the collective articulated goals. As previously noted, Ghoshal and Bartlett (1988) found that integrated subsidiary units, which shared the same overall strategy, goals, and values as their parent MNE, experienced higher knowledge diffusion. As the subsidiary is actively seeking knowledge transfer, the speed of transfer should be more rapid than if the transfer is directed by the parent organization. Therefore, we propose the following:

*P3a.* The higher the level of articulated goal acceptance and internalization a subsidiary unit shares with the parent company, the faster the speed of knowledge transfer between MNE units.

*4.3.2 Organizational culture.* As discussed before, the processes of knowledge transfer are frequently associated with major adjustments at the recipient (i.e. subsidiary) unit, such as the disruption of existing practices for new practices and changes in the organizational culture from previously accepted norms and routines. Additionally, conflict between units of an MNE may occur because of national cultural misunderstanding or disagreement concerning goals and/or operational or managerial expectations concerning the transfer of knowledge (Lyles and Salk, 1996). As such, MNEs units' conflicts may impede the flow of information. A recurring theme in the knowledge transfer literature is that conflict in general and cultural conflict in particular can lead to poor performance (Bivens and Lovell, 1996; Killing, 1983; Lane and Beamish, 1990). Thus, cultural misunderstandings, whether organizational or national, and conflict between MNE units may disrupt an efficient (i.e. rapid) knowledge transfer.

Though impediments to the rapid transfer of knowledge due to cultural misunderstanding need not engender conflict, managers in an MNE who are more receptive to learning, innovation, and change likely will result in more positive attitudes toward the transfer process (Kostova, 1999). Hence, a subsidiary that has an organizational culture for change will more readily accept the transfer process leading to an increased speed of adoption. This effect reflects characteristics of the subsidiary that applies to all types of activities associated with learning, innovation, and change in general. Thus, an organization with a culture that encourages learning, innovation, and change will tend to be willing to accept new knowledge or capability.

Consequently, a subsidiary of an organization with such a culture is more likely to embrace risk and be more actively engaged in the transfer of knowledge. As the subsidiary's culture encourages the process of change and innovation, the rapidity with which the subsidiary engages in knowledge transfer should be higher than those organizations more adverse to change or with a culture less accepting of innovation. Thus, we propose:

*P3b.* An MNE unit that has an organizational culture which promotes a high degree of learning, innovation, and change will experience a faster speed of knowledge transfer from the other MNE units.

## 5. Conclusion

The speed of knowledge transfer for an organization has the potential to provide competitive advantage (D'Aveni, 1994; Ensign, 1999; Lieberman and Montgomery, 1988). The capability to transfer knowledge faster internally throughout all units of the organization (i.e. inter-unit or intra-organizational) is especially critical for MNEs that are involved in either exploiting their existing knowledge or exploring new knowledge

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to develop new competencies. MNEs with this capability can remain ahead of their competitors and reap rich benefits in terms of superior profitability. However, the transfer process is complex and not well understood.

In this research, we have provided a new framework for understanding how an MNE may increase the speed of knowledge transfer among its units. Our conceptual framework builds on the literature in the field of knowledge transfer by integrating the developments in the field of social capital theory. We provide a richer argument for why and how social capital can speed the transfer process and benefit organizations operating in highly competitive environments. This research suggests that MNEs should structure their relationship with subsidiaries in a way that facilitates the development of higher social capital in order to promote faster and more successful knowledge transfers. We also contribute to the literature in knowledge management by arguing that knowledge management is a social process and a better understanding of this process requires a deeper understanding of organizational socialization processes.

This study has practical implications. Knowledge management is recognized as a competitive advantage for organizations and learning what factors might facilitate or impede a rapid and successful transfer of knowledge among organization units is of strategic importance. Future research studies can test the relationships proposed in this paper using knowledge exchange data throughout all units of an organization. Future studies could also test the interaction effect between the three dimensions of social capital and its affect on the speed of knowledge transfer. We also believe that social capital may influence other components of knowledge transfer such as the complexity of the knowledge being transferred. Future research in this area can link social capital with other dimensions of knowledge transfer.

Though the model presented here has conceptual strength, it also suffers from conceptual limitations. It is a simplified picture of a complex problem. There are numerous additional questions that could be investigated in future theoretical developments thus providing an even more robust understanding of the phenomenon under consideration. Additionally, we have just considered the role of knowledge transfer speed when it is crossing national boundaries within the confines of an MNE. Do organizations experience the same phenomena when they transfer knowledge solely with units within their own national borders? Also unexamined is the role of social capital in facilitating knowledge transfer between two firms engaged in a strategic alliance.

Finally, the success of knowledge transfer very much depends on a company's ability to effectively manage that knowledge transfer process. We have argued that a critical component in understanding knowledge transfer in the international arena is the speed of that knowledge transfer (and those factors that influence that speed) between different units. However, the role of the speed of knowledge transfer in the realm of knowledge management in MNEs has been neglected. The speed of knowledge transfer is critical for MNE organizations to build or maintain their competitive advantage. In this paper, we drew upon social capital theory and argued that social capital is related to the speed of knowledge transfer from the parent company to the foreign subsidiary. The three dimensions of social capital, i.e. relational, dimensional, and cognitive, facilitate the transfer process and have effects on the rapidity of the technology transfer. This study has, we hope, demonstrated the value of using social capital to better understand knowledge management at the intra-firm level of an MNE.

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