

**KNOWLEDGE TRANSFER SUCCESS IN MNES: THE ROLE OF
TRAINING AND DEVELOPMENT AND KNOWLEDGE
TRANSFER CAPACITY**

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Abstract

The capability to transfer knowledge successfully within the multinational enterprise (MNE) has been identified as a source of competitive advantage. This paper develops a conceptual framework that links the knowledge transfer capacity of MNE employees, training and development, and the degree of knowledge transfer success within MNEs. The integrative conceptual framework bridges the disciplines of international business and strategic human resource management, and organisational and individual levels of analysis in MNEs. Thus, from its perspective of the capability-based view of knowledge transfer, it contributes to building theory and an agenda for future research into knowledge transfer capacity in MNEs.

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KNOWLEDGE TRANSFER IN MNES

Successful knowledge transfer is a complex and essential aspect of management in multinational enterprises (MNEs). Knowledge transfer capacity, or maximising all available resources to transfer knowledge, has been proposed as an important dimension of such knowledge transfer. The concept reflects the strategic role of both knowledge sources and recipients in the knowledge transfer process. However, relatively little is known about the means by which knowledge transfer capacity is developed, maintained and or increased in MNEs. The theoretical contribution of this paper lies in its bridging of the international business knowledge transfer and strategic human resource management (HRM) literatures, via capability-based approaches, including resource-based (Barney, 1991; Wernerfelt, 1984) and knowledge-based (Grant, 1996; Kogut and Zander, 1992, 1993; Nonaka, 1994) views. First, the paper reviews knowledge transfer determinants and explains knowledge transfer capacity in relation to capability-based approaches and strategic HRM. Second, the paper introduces the role of training and development, a key strategic HRM function that builds employee skills, in relation to knowledge transfer capacity. Third, the paper proposes a conceptual framework linking the degree of knowledge transfer success with the knowledge transfer capacity of MNEs, and training and development. The paper concludes with some implications for achieving successful knowledge transfer in MNEs.

Knowledge Transfer Determinants within MNEs

The identification of knowledge transfer determinants remains a critical research area among international business scholars because these determinants can also be obstacles to knowledge transfer. According to the intra-MNE knowledge transfer literature, there are four main groups of empirically tested determinants: knowledge characteristics; knowledge source characteristics; knowledge recipient characteristics; and, the characteristics of the relationship between knowledge source and recipient.

Knowledge characteristics include tacitness (Bresman, Birkinshaw and Nobel, 1999; Zander and Kogut, 1995), complexity (Zander and Kogut, 1995) and causal ambiguity (Szulanski, 1996). Findings from the research on knowledge characteristics show that the harder it is to articulate, to comprehend and to foresee the outcomes of the knowledge, the more difficult it is to transfer. Yet, some knowledge theorists say that valuable tacit knowledge can be made into explicit knowledge through employees' continuous interaction, and that it can therefore become organisational knowledge capable of producing competitive advantage (Nonaka, 1994; Nonaka, Toyama and Nagata, 2000). It appears that tacitness, complexity, and causal ambiguity may be reduced in the long term if the right type and amount of interaction between employees as knowledge sources and recipients occurs in MNEs.

The research on characteristics of knowledge sources and recipients focuses on MNEs' capabilities in knowledge transfer. Capability, or competence, is strongly related to the concept of knowledge transfer capacity because this determines the likelihood that all available resources necessary for the desired knowledge transfer are utilised. The seminal study by Teece (1977) concluded that the success of knowledge transfer relied heavily on the accumulation of skills that facilitated the transfer process. The area of MNEs' capability in knowledge transfer is relatively under-researched.

Recent knowledge transfer literature describes the characteristics of knowledge recipients as their strategic positions within the MNE (Tsai, 2001) and their absorptive capacity (Gupta and Govindarajan, 2000; Minbaeva, Pedersen, Björkman, Fey and Park, 2003; Tsai, 2001). Strategic position affects the degree of knowledge transferred to recipients. For example, it is highly likely that a knowledge source differentiates potential recipients depending on the types of operation. For instance, if a potential recipient engages only in simple production operations that do not

require a lot of knowledge, the source might not consider transferring their knowledge to the recipient. Network position and absorptive capacity are closely linked. For example, Tsai (2001) found that recipients' network position is strongly related to absorptive capacity in explaining recipients' performance. Absorptive capacity is the collective notion of organisation's capability to exploit unfamiliar knowledge (Cohen and Levinthal, 1990) and is useful in explaining differences between recipients' capabilities in knowledge transfer. However, the concept of absorptive capacity is too passive here because the term reflects recipients' capability to *accept* knowledge but not to *seek* it. We suggest a more proactive view of the role of recipients in the knowledge transfer process is appropriate; consistent with the increasing importance being placed on subsidiaries' strategic roles within MNEs (Mudambi and Navarra, 2004; Rugman and Verbeke, 2001).

The characteristics of knowledge sources, especially the differences between sources' capabilities in knowledge transfer, have received even less attention from researchers to date. These include the source's motivation (Szulanski, 1996) and disseminative capacity (Minbaeva and Michailova, 2004). Also not much international business knowledge transfer literature directly examines differences in sources' capability. This probably is due to the assumption that the knowledge source is always capable of transferring knowledge.

Studies of the relationship between knowledge sources and recipients cover MNE structure (Björkman, Barner-Rasmussen and Li, 2004; Gupta and Govindarajan, 2000; Tsai, 2002), the informal and formal lateral interaction within MNEs (Bresman et al., 1999; Gupta and Govindarajan, 2000; Schulz, 2003; Tsai, 2002), and sharing of vision (Li, 2005). Differences in the cultural or social contexts of sources and recipients have also been included here (Hurt and Hurt, 2005). Extending this research, we suggest that the concept of social network is critical to knowledge transfer because the network facilitates the exchange of knowledge between source and recipient.

In summary, characteristics of and relationships between knowledge sources and recipients may increase or decrease knowledge transfer capacity in MNEs. We propose that knowledge transfer capacity might, therefore, be partly a function of MNEs' capability in knowledge transfer. In this section we have highlighted existing knowledge transfer literature that has examined different capabilities in knowledge transfer across MNEs. The next section examines the links between these capabilities and knowledge transfer capacity.

Knowledge Transfer Capacity of MNEs

Knowledge transfer capacity is a relatively new theoretical construct proposed by Martin and Salomon (2003). It consists of source transfer capacity and recipient transfer capacity. Knowledge transfer capacity is critical for our proposed conceptual model because it incorporates the idea of firm heterogeneity, especially of source organisation, in building capabilities to transfer knowledge within MNEs. Emphasis on firm heterogeneity is consistent with the argument of capability-based approaches in strategic management research. Source transfer capacity is defined as "the ability of a firm (or the relevant business unit within it) to articulate uses of its own knowledge, assess the needs and capabilities of the potential recipient thereof, and transmit knowledge so that it can be put to use in another location" (Martin and Salomon, 2003: 363). Recipient transfer capacity is defined as recipient's ability to "assimilate and retain knowledge from a willing source" (Martin and Salomon, 2003: 363). Recipient transfer capacity assumes that recipients are capable of actively involving themselves in knowledge transfer. In this respect, recipient transfer capacity differs from absorptive capacity.

The constructs of knowledge transfer capacity developed by Martin and Salomon (2003) are important. We regard the constructs reflect major findings of the existing international business knowledge transfer literature that examines MNEs' capabilities in knowledge transfer. Knowledge transfer capacity also reflects a recent trend in strategic management research as examined in the following section. However, we propose that source-recipient relationship be included as a third element of knowledge transfer capacity. We argue that not only is knowledge transfer capacity influenced by the nature of each source and recipient of knowledge in MNEs, but also by the type of

relationships between them. As suggested above, the nature of the relationship between source and recipient in control terms has been examined by various international business scholars as an important determinant of the degree of knowledge transfer success. However, with regard to the knowledge transfer capacity of MNEs, it is necessary to examine this relationship in terms of social networks.

THE CAPABILITY-BASED APPROACHES AND KNOWLEDGE TRANSFER WITHIN MNEs

Examining differences in MNEs' knowledge transfer capacity reflects a recent trend in strategic management research, including strategic HRM in MNEs, the research area that examines HRM outcomes of MNEs' strategic activities (De Cieri and Dowling, 1999). This involves looking inside the 'black box' of a firm, long regarded by economists to be an automatic mechanism by which resource inputs are converted to goods and services. Consequently, increasing attention has been paid by researchers to "capability-based approaches" including resource-based and knowledge-based views (Tallman and Fladmoe-Lindquist, 2002).

According to the resource-based view, firm resources include both tangible and intangible assets (Wernerfelt, 1984) such as firm-specific knowledge and its use (Barney, 1991) as well as human resources and HRM systems (Barney and Wright, 1998). The essence of the resource-based view is that the competitiveness of a firm lies in the heterogeneous capabilities arising from the tangible and intangible resources they possess at a given time. This approach implies firms are capable of leveraging given resources in order to develop sustainable competitive advantage. Also, these resources can be developed over time (Barney, 1991). The resource-based view has largely legitimised strategic HRM, the foundation of strategic HRM in MNEs, due to the theory's recognition of human resources as sources of competitive advantage (Wright, Dunford and Snell, 2001).

Unlike the resource-based view, the knowledge-based view is not a single theory but rather "a confluence of long-established interests in uncertainty and information with several streams of newer thinking about the firm" (Grant, 1996: 110). The latter considering: knowledge as one of the intangible resources of a firm (Grant, 1996, 2002); the relationship between knowledge sharing and creation, and firm performance (Hedlund, 1994; Nonaka, 1994; Nonaka et al., 2000); and the relationship between choice of foreign entry mode and the characteristics of knowledge that a firm intends to transfer abroad (Kogut and Zander, 1992, 1993).

With regard to knowledge transfer, resource-based and knowledge-based views are complementary perspectives. The resource-based view explains the heterogeneity of MNEs in developing their capabilities. The knowledge-based view suggests knowledge is a reason firms exist and that it is vital for remaining competitive among rivals. As such, the knowledge-based view asserts that successful knowledge transfer is critical for MNE's competitiveness. We suggest that none of these approaches alone can explain the complex process of knowledge management, including knowledge transfer.

A problem with the international business knowledge transfer literature is that it tends to treat MNEs at the organisational level because this discipline has sought to explain the existence of MNEs. Since knowledge is embodied in and transmitted by individuals in MNEs, it is also critical to theorise capabilities at the individual level within MNEs and to analyse the interplay between organisations and individuals.

Knowledge Transfer Capacity and Strategic HRM in MNEs

Examining the relationship between strategic HRM in MNEs and knowledge transfer capacity is essential because developing employees' capabilities in knowledge transfer seems critical for achieving successful knowledge transfer through maximal knowledge transfer capacity.

The role of human resources and HRM systems in developing competitive advantage is the core research interest of strategic HRM discipline. However, consensus among scholars regarding which HRM practices are more conducive in improving overall firm performance is lacking (Ferris, Hochwater, Buckley, Harrell-Cook and Frink, 1999). According to the resource-based view of HRM, a certain combination, or bundle of HRM practices, rather than a single one, as well as certain groups of employees, rather than a few outstanding personnel of a firm, are important for firm performance and competitive advantage (Barney and Wright, 1998; Huselid, 1995; Wright et al., 2001). However, substantial empirical investigation of the importance of these practices is yet to occur.

There is an emerging consensus among strategic HRM scholars for categorising various HRM practices into three conceptual groups: “employee skills (practices aimed at attracting and developing the skills of the workforce), motivation (practices that elicit high motivation), and empowerment (practices enabling employee voice and influence” (Wright and Boswell, 2002: 253). Our proposed framework focuses on employee skills as the development and acquisition of these appears necessary for achieving maximal knowledge transfer capacity.

THE ROLE OF TRAINING AND DEVELOPMENT IN KNOWLEDGE TRANSFER WITHIN MNEs

Apart from literature that examines the role of expatriates as knowledge transfer agents sent from headquarters (Kamoche, 1997; Tsang, 1999), the role of HRM systems in knowledge transfer both at organisational and individual levels in MNEs has received relatively little attention from researchers. The notable exception is that of Minbaeva and her colleagues (Minbaeva, 2005; Minbaeva and Michailova, 2004; Minbaeva et al., 2003).

In Minbaeva et al.'s work, knowledge recipients' capability is defined as absorptive capacity (Minbaeva, 2005; Minbaeva et al., 2003), and they found this had a significant impact on the degree of knowledge transfer. With regard to HRM practices, these authors found that the combination of training and compensation, and promotion and appraisal positively affected development of recipient capability. From these findings, we can confirm that employee training and development within recipient organisation plays vital role in recipient's employee capability building, and the degree of knowledge transfer. Knowledge sources' capability is defined as the “disseminative capacity”, exemplified as the presence of long-term international assignees in recipient organisation (Minbaeva and Michailova, 2004: 668). This was significantly correlated to the degree of knowledge transfer. It has been said that the management of these assignees is important for knowledge transfer within MNEs (Kamoche, 1997; Tsang, 1999). International assignee management includes training before the assignment and ongoing career development. Therefore, we suggest that the role of training and development in source employee capability building is also important to the degree of knowledge transfer.

In the existing HRM related knowledge transfer literature, especially with regard to Minbaeva et al.'s research, three major gaps are apparent. First, interaction between source and recipient organisations' HRM systems and their complementarity should come into play. For instance, it is important to examine if a given MNE has global HRM policies, and if so, whether they are actually practiced. Global training and development programmes are not only related to employee skills management, but also related to facilitating social networking among different units within an MNE. The existing literature within strategic HRM in MNEs area has not focused on this aspect. Second, there is a conceptual issue. As noted earlier, Martin and Salomon's (2003) concept of recipient transfer capacity is different from that of absorptive capacity. Minbaeva and colleagues' focus on absorptive capacity is too passive in relation to recipient capability. Are recipients also capable of seeking know-how from a specific willing and cooperative source? Third, there is a unit of analysis issue. Minbaeva et al. touch only upon the role of long-term and temporary international assignees from a knowledge source in examining its capability and characteristics. This does not adequately reflect the more complex interaction mechanisms existing in contemporary MNEs.

International assignees from source organisations are important knowledge transfer agents, but are they the only source of knowledge transfer within MNEs?

THE CONCEPTUAL FRAMEWORK

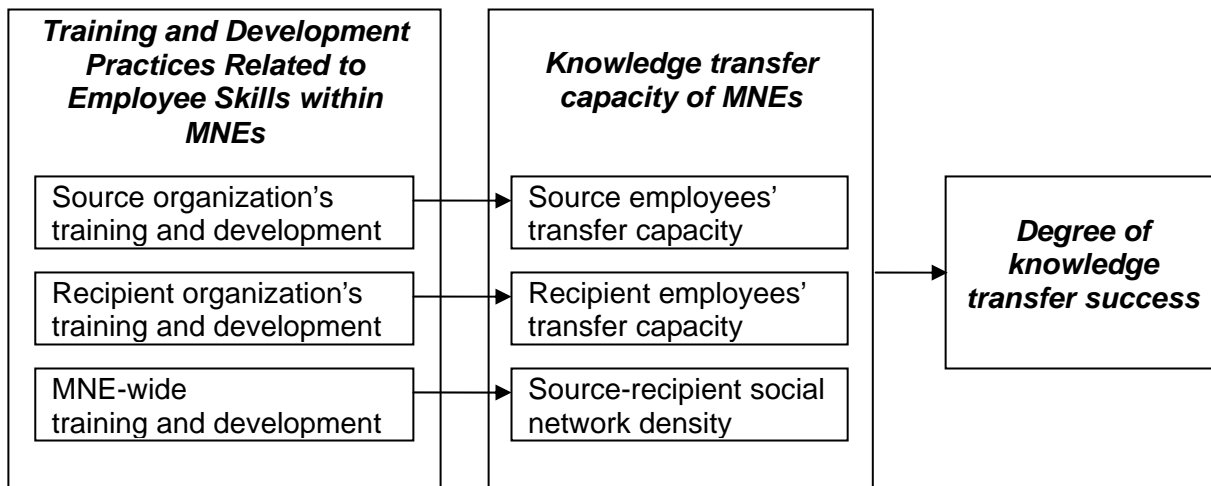
The conceptual framework presented as Figure 1 summarises the preceding discussion. It links HRM practices related to employee skills management through training and development, to the degree of knowledge transfer success. These two are mediated by the knowledge transfer capacity of MNEs, as indicated by the arrows. Here, knowledge transfer capacity consists of source and recipient employees' capacities and source-recipient social network.

Extending the concepts of source transfer capacity and recipient transfer capacity (Martin and Salomon, 2003), we have defined source employees' knowledge transfer capacity as *the ability of source employees to articulate uses of their own knowledge, assess the needs and capabilities of the potential recipient, and transmit knowledge so that it can be put to use within the recipient organisation*. We have defined recipient employees' knowledge transfer capacity as *recipient employees' ability to assimilate and retain knowledge from a willing source*. In addition to these two, the strong social linkage between source and recipient is critical in order to build both source and recipient employees' knowledge transfer capacity. This is because the social network between the two counterparts makes it easier for each to spot the *right* source or the recipient of the focal knowledge. The aggregate of employees' capacities in both source and recipient organisations and the density of social network between source and recipient are proposed to affect degree of knowledge transfer success.

Reflecting a capability-based approach that asserts firm's resources and capabilities can be developed over time (Barney, 1991; Wright et al., 2001), the conceptual framework proposes that bundles of training and development practices in both source and recipient organisations and MNE-wide level build knowledge transfer capacity of MNEs. For instance, the nature and level of language and cross-cultural training in source organisations may affect their employees' capability to articulate their internal knowledge in the language used by recipient employees and, in turn, to their capacity to transmit the knowledge within their own cross-cultural contexts. Recipient organisations' HRM practices that enhance employees' career development may affect recipient employees' skills in searching for the right source units to seek know-how directly from their employees. MNE-wide, executive and middle manager level global training and development programmes may facilitate social networking between physically dispersed units within MNEs which are potential knowledge sources and recipients. In such ways, training and development practices could build knowledge transfer capacity within MNEs.

As MNEs differ in terms of their bundles of HRM practices, knowledge transfer capacity developed in some MNEs over time is expected to be different from others. This will result in different degrees of knowledge transfer success across MNEs and different levels of competitiveness. We suggest that training and development plays a vital role in developing employee skills necessary for achieving maximal knowledge transfer capacity and successful knowledge transfer for sustainable competitive advantage.

Figure 1: The Role of Training and Development, and Knowledge Transfer Capacity in Successful Knowledge Transfer within MNEs



CONCLUSION

This paper integrates concepts from international business and strategic HRM in MNEs. It has highlighted the importance of training and development related to MNE employees' skill generation in successful knowledge transfer. The proposed conceptual framework reflects capability-based approaches and relates the degree of knowledge transfer success, mediated by knowledge transfer capacity, to bundles of MNE training and development practices for employees of both source and recipient organisations and also that facilitates source-recipient social network building. With regard to future research, the conceptual framework has identified the need for organisational and individual levels of analysis in relation to training and development, and knowledge transfer capacity in successful knowledge transfer. The skills required to enhance knowledge transfer capacity at both levels and determining which specific training and development practices facilitate development of knowledge transfer capacity are also on the agenda.

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