

How local firms in less-developed countries learn from foreign partners

Omid Aliasghar

School of Management, University of Otago, Dunedin, New Zealand

Email: omid.aliasghar@otago.ac.nz

Professor Elizabeth Rose

School of Management, University of Otago, Dunedin, New Zealand

Email: elizabeth.rose@otago.ac.nz

Dr Jing (Annie) Zhang

School of Management, University of Otago, Dunedin, New Zealand

Email: jing.zhang@otago.ac.nz

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ABSTRACT: *This conceptual paper considers learning strategies that exist in many developing-country firms. Previous studies have highlighted a need for domestic companies to develop their competency, to compete successfully. However, little is known about the types of learning that local firms require (explorative or exploitative) and the strategies that they employ to learn (experiential or cooperative). While numerous studies have enhanced our understanding of exploratory and exploitative learning, we add a consideration of learning procedures, as a step toward developing a comprehensive understanding of the learning strategies employed by domestic firms in less-developed markets. Specifically, we investigate the impacts of the richness of local firms' relationships with foreign partners, along with local firm's R&D intensity on learning strategies.*

Key words: learning strategy, explorative learning, exploitative learning, relationship richness, R&D intensity

INTRODUCTION

Domestic firms in developing countries are faced with disadvantages when competing with multinational enterprises (MNEs). When they enter less-developed markets, MNEs alter the distribution of market share and put pressure on domestic firms to defend their market positions and profits (Blomström & Sjöholm, 1999).

These disadvantages stem from the facts that, despite their superior knowledge about doing business in their home markets, the domestic firms often suffer from a lack of advanced technologies (Pack & Saggi, 1997), do not have sufficient knowledge and resources, cannot only rely on internal resources for competing in the market, and have less experience than the internationally-operating MNEs (Uhlenbruck, Meyer, & Hitt, 2003). As a result, local firms can lose market share, and experience diminished purchasing capability (Linz & Krueger, 1998; Meyer & Møller, 1998). One of the ways in which domestic firms can improve their competitive landscape is to learn from MNEs. This leads to two questions. (1) How can domestic firms learn from MNEs? (2) What factors may influence the domestic firms' learning? To address these issues, we focus on the learning strategies of

domestic firms in developing economies, and attempt to advance the understanding of the formulation of different learning strategies by drawing on the literatures on internationalisation and ambidextrous learning (Kang & Snell, 2009).

The organizational learning literature argues that learning is a means to pursuing both exploration and exploitation of knowledge. As March (1991) noted, exploration and exploitation are two kinds of learning used in organizations. Exploration and exploitation are two different activities that depend on particular organizational procedures (Dosi, Nelson, & Winter, 2000). While exploration includes searches for new technology and knowledge in order to facilitate flexibility and risk taking (McGrath, 2001), exploitation is identified with expanding the firm's existing knowledge, facilitating stability, uniformity, and control (Benner & Tushman, 2003). Both explorative and exploitative learning affect the firm's incentive to make the strategic decision to start collaborating with MNEs in order to apply the knowledge acquired (Rothaermel & Deeds, 2004). In other words, decisions regarding allocation of resources between exploration and exploitation learning can be troubling for local firms to make (He & Wong, 2004). However, explorative and exploitative learning need different sources and processes (Stettner & Lavie, 2014). From this is clear that, firms are confronted with the challenging question about choosing between explorative and exploitative learning (Kang & Snell, 2009; Lin, Yang, & Demirkan, 2007).

Furthermore, domestic firms' learning strategies are influenced by their relationships with external knowledge sources (Ferrerias-Méndez, Newell, Fernández-Mesa, & Alegre, 2015). Prior research suggests that rich and stable relationship with MNEs can help domestic firms to increase trust and enhance mutual understanding of foreign partners, and enhance their performance (C. W. Chen, Chang, Tseng, Chen, & Chang, 2013; Morgan & Hunt, 1994; Paulraj, Lado, & Chen, 2008). In this paper, rich relationship defines as the amount of interacting and communicating between MNEs and local firms. On the other hand, based on Cohen and Levinthal (1990), internal R&D can develop firm's capability to exploit external knowledge and plays a key role in the process of acquiring and transferring external knowledge to the domestic firms (Cohen & Levinthal, 1990). Local firms can enhance their knowledge-related capabilities based on their internal R&D activities. Investing on

internal R&D in domestic firms can help them to collaborate more efficient with foreign partners (Chang, 2003). In order to develop a learning organisation, firms may need practical strategies to support R&D activities. Prior firm-specific knowledge can help managers to identify and assimilate external knowledge (Todorova & Durisin, 2007). In this respect, if you want to be a good ‘buyer’, you need to be a good ‘maker’(Radnor, 1991).

Building on these perspectives, the purpose of this paper is to conceptualise how domestic firms’ internal R&D intensity and the richness of their relationship with locally-operating MNEs are two dimensions that influence the domestic firms’ learning strategies.

The paper is organized as follows. In the next section, we review the applicable literature. Then, we examine how local firms’ learning strategies may be influenced by internal R&D and the richness of their relationships with MNEs, along with the development of the propositions to guide future research. Finally the conclusion and contributions are discussed.

Literature review and Propositions

Explorative and exploitative learning in domestic firms

The term ‘exploratory learning’ includes the testing of new alternatives, in order to acquire extra knowledge to enhance an organisation’s knowledge stock (March, 1991). ‘Exploratory learning’ offers important contributions to creativity and productivity within organizations (Lichtenthaler, 2009). It is important to note that the core of exploration is testing unfamiliar alternatives (March, 1991). As a result, its returns are uncertain, indirect, and sometimes weak. Exploration involves some activities such as scanning, risk taking, testing, flexibility, and creativity (March, 1991).

On the other hand, exploitative learning encompasses activities such as refinement, selection, efficiently application, and implementation (March, 1991). It pertains to the expansion of existing abilities. While exploratory learning is likely to be more creative and distinctive, exploitative learning is likely to be more accumulative (March, 1991). Refining and extending current capabilities,

knowledge and tendencies is at the core of exploitation. Its outcomes can be accurate, positive and expectable (March, 1991).

Both exploration and exploitation are important, and potentially valuable, for firms. However, studies suggest that it is very difficult to undertake both activities at the same time (Levinthal & March, 1993). Scholars have found that the expenses of coordinating and managing between exploration- and exploitation-related activities within firms are often high (Adler, Goldoftas, & Levine, 1999; Gibson & Birkinshaw, 2004). These two types of learning usually require different procedures, capabilities, and structures (McGrath, 2001). As such, they often contest each other for rare resources within the organisation (March, 1991).

As noted earlier, stable relationship between firms can assist in the development of technology transfer and improve performance (Bleeke & Ernst, 1993; C. W. Chen et al., 2013). Although little is known, yet, about how much the richness of relationships can impact on local firms' learning strategies, this is a very important topic to examine (Ferrerias-Méndez et al., 2015).

Furthermore, local firms identify, transfer, and exploit knowledge from external resources. One attribute that may help firms to have a better assimilation of exogenous knowledge is internal R&D intensity (Cohen & Levinthal, 1990). Mowery (1984) suggests that, if firms want to absorb more and better external knowledge, they should invest in their own R&D. According to Cohen and Levinthal (1990), A positive relationship has been identified between R&D investing within in firms and the amount of knowledge available in the external environment. The more they invest on R&D, the greater they should be able to acquire learn and assimilate the external knowledge (Cohen & Levinthal, 1990).

Domestic companies in developing countries have been observed to engage in both exploratory and exploitative learning (Hitt, Li, & Worthington, 2005). In addition, firms can employ cooperative and experiential learning processes to engage in both explorative and exploitative learning (Holmqvist, 2004). Cooperative learning comes from working with MNEs, while experiential learning happens via learning-by-doing or first-hand experiences.

In this way, we can identify four kinds of learning approaches available to the domestic firms: cooperative-exploratory, cooperative-exploitative, experiential-explorative, and experiential-exploitative (Hitt et al., 2005). Figure 1 displays these learning strategies in the context of both the richness of local firms' relationships with MNEs and R&D intensity.

[Insert Figure 1 here]

Cooperative-exploratory learning

Some firms lack adequate internal resources for creating novel opportunities, and need to rely on acquiring knowledge from external resources (Cattani, 2005). Such firms aim to search and absorb externally-based knowledge, to assist them in responding to market needs (Cassiman & Veugelers, 2006). In this situation, one of the key tasks is to recognise and assimilate knowledge across organizational boundaries (Zahra & George, 2002). Cooperative-exploratory learning includes creating new knowledge that is distinct from the firm's current knowledge stocks, through working with others (Hitt et al., 2005).

Local firms wanting to acquire knowledge efficiently from MNEs through exploratory learning may need, to develop deep relationships with partners, in order to create trust that facilitates the transfer of technology enhanced learning (Hansen, 1999; Laursen & Salter, 2006). Furthermore, when dealing with tacit knowledge, deep and intense communication may be necessary, to facilitate the transfer and effective integration of new knowledge (J. Chen, Chen, & Vanhaverbeke, 2011). The more they can interact with the MNEs, the more local firms should be able to create new ideas and increase their knowledge base. On this basis, local firms with strong-tie relationships with MNEs may benefit more from explorative learning than exploitative learning. There is evidence that such cooperation with external partners can assist domestic companies to access new knowledge; for example, in the McDermott and Corredoira (2010) Argentina-based study, the quality of relationships between firms had an important effect on generating new ideas for problem solving.

In addition, Cohen and Levinthal (1990) found that greater R&D intensity was associated with enhanced learning, on the basis that knowledge diversity helps firms to identify a broader set of

connectable knowledge. In addition, high R&D intensity may reflect the firm's strong interest in creating new ideas and innovation (P. Bierly & Chakrabarti, 1996; Geiger & Makri, 2006).

Local firms can use different methods to acquire and absorb knowledge from MNEs (Dyer & Hatch, 2006; Dyer & Singh, 1998; Inkpen & Dinur, 1998; Kogut & Zander, 1992), including as a shared language, reciprocal trust, and strong communication to develop understanding (Doz, 1996; Yli-Renko, Autio, & Sapienza, 2001). Such approaches may assist firms to gain information and embed knowledge that may be challenging to learn from partners. The development of stable and rich relationships between local firms and MNEs can allow for better transfer of knowledge and technology via cooperative-explorative learning (Cohen & Levinthal, 1990).

Thus, higher R&D intensity may assist local firms to be more innovative and able to expand their knowledge stocks (Kimberly & Evanisko, 1981) and create new ideas (Aiken & Hage, 1971). Furthermore, collaborating with MNEs offers opportunities for local firms to learn from their larger partners; local firms may use this knowledge to create new technologies, based on exploratory innovation (Atuahene-Gima, 2003; McFadyen & Cannella, 2004; Subramaniam & Youndt, 2005). Subramaniam and Youndt (2005) suggest that social relations help firms to have a better abilities in exploratory innovation, and more extensive connections may assist local firms in enhancing trust and learning (Adler & Kwon, 2002). On this basis, we propose:

Proposition 1: Firms with higher R&D intensity and more rich relationships with MNEs are more likely to undertake cooperative-explorative learning.

Cooperative-exploitative learning:

Cooperative-exploitative learning involves integrating knowledge transferred from MNEs with existing knowledge within the firms in order to exploit it (Hitt et al., 2005).

On one hand, local firms can focus on exploitative learning when they have low levels of R&D activity; underinvestment in R&D can affect the development of both products and processes in the organization (Jansen, Van Den Bosch, & Volberda, 2006). In other words, the potential of firms to

transfer and implement external knowledge is facilitated through internal R&D (P. E. Bierly, Damanpour, & Santoro, 2009). Local firms with low R&D intensity may encounter more difficulty in absorbing new knowledge from MNEs and face more challenges in exploring new ideas. Low levels of R&D may mean that firms will focus more on exploiting existing knowledge. Exploitative learning includes routinization of experiences generated from communicating with MNEs (Holmqvist, 2004). Such learning happens when domestic firms can communicate with MNEs efficiently based on trust and common routines (Hitt et al., 2005). These routines may affect development of new capabilities in domestic firms through cooperative-exploitative learning (Winter & Nelson, 1982).

On the other hand, interacting with MNEs creates opportunities for local firms to enhance their knowledge indirectly. However, low levels of R&D may not allow them to identify new knowledge from MNEs.

In domestic firms with lower R&D, exploratory innovation may be hampered by lower overall of flexibility and innovation. Previous work has emphasised that exploitative innovation is more likely when firms focus on current processes (Sheremata, 2000). Thus, in the case of rich relationships, local firms may try to find common routines from MNEs in order to transfer the knowledge and exploit it.

Proposition 2: Firms with lower R&D intensity and more rich relationships with MNEs are more likely to undertake cooperative-exploitative learning.

Experiential-exploratory learning

According to Hitt et al. (2005, p. 360), ‘experiential–exploratory learning creates knowledge through self-search, self-discovery, and self-experimentation’. Such learning involves expanding novel routines via process of testing and experiencing them in the domestic markets (March, 1991).

This kind of learning may be significantly important for domestic companies because foreign firms may be reluctant to share their knowledge and abilities that represent of their core competencies and key competitive assets. MNEs thus have strong incentives not to share their higher-level technological

knowledge with others, including host-country partners (Hamel, 1991), which has the potential to diminish local firms capabilities to learn. Because they may not have access to knowledge via cooperative learning, local firms may need to count more on experiential learning.

Such learning includes experiencing new contexts in order to add to the firm's knowledge stocks, generating implicit knowledge via learning-by-doing. Under certain circumstances, it may also include exploratory learning, when it can create new ideas.

Local firms can gain knowledge and new technologies via techniques such as scanning, reverse-engineering, and copying (Lane & Lubatkin, 1998). Such acquisition of new technologies and abilities from partners can enhance innovation (Mingzhi Li & Song, 2015). In an intensively competitive market with a high pace of change, it may be particularly important for domestic firms to use experiential learning, especially if they experience a lack of cooperation with MNEs. In this market, domestic firms should develop their capabilities via utilizing, experiencing, and learning from the results of internal activities (Hitt et al., 2005). For example, firms in emerging markets can learn, from benchmarking MNEs, about the ways in which they treat costumers (Bartlett & Ghoshal, 2000). Then, building on their deep understanding of their domestic markets; these firms can develop their abilities to satisfy even distinctive needs of domestic customers (Dawar & Frost, 1999).

Because firms are understandably reluctant to share critical knowledge with partners, because of the risk of losing their competitive advantage, companies need to be prepared to extend their knowledge by exploiting current process and trying to explore new technologies (Floyd & Lane, 2000). In this way, firms can develop and enhance their abilities in order to survive (Bartlett & Ghoshal, 2000).

In experiential learning, firms learn not only from observation, but also from their own experience. The presence of foreign firms in their domestic market not only places pressure on domestic firms to learn proactively, but also provides them with access to the necessary knowledge stock. If domestic firms can learn and exploit the knowledge that they acquire from foreign entrants, they have the potential to improve their abilities and achieve strategic advantage (Hitt et al., 2005).

Cohen and Levinthal (1990) identified a positive relationship between a firm's R&D investment and the amount of knowledge available to it in the external environment. Firms with high R&D intensity should be able to absorb more knowledge, although this can take time for complicated knowledge (Schildt, Keil, & Maula, 2012). Therefore, we propose that local firms with high R&D intensity and less dense relationships with MNEs may be able to use first-hand experience and then combine it with existing knowledge in order to drive innovation.

Proposition 3: Firms with higher R&D intensity and lower rich relationships with MNEs are more likely to undertake experiential-exploratory learning.

Experiential-exploitative learning

This type of learning relies on the firm's internal experiences in order to improve and execute new methods that have been learned from external sources. The purpose of this learning is exploiting the knowledge learned, however because of the novelty of this knowledge; local firms should test and try to learn from experiences of using this knowledge. Local firms may try to adapt and expand this knowledge in order to develop their competitive landscape (Hitt et al., 2005). For instance, many local companies in China benefitted from external technologies that they absorbed from MNEs, and then modified this knowledge to better fit the Chinese market (Lu, 2000). In emerging markets, customer needs may be less complicated, and domestic firms have the chance to localise and adjust externally-generated technology to satisfy local market demands and foster the competitive landscape. In the process, local firms can learn via this cycle of experience and modification (Hitt et al., 2005). Less rich relationships with MNEs may force local firms to rely more on their own experiences.

Lack of sufficient R&D can lead local firms to use their experiences to gain new knowledge. It can involve experiencing new knowledge in order to expand implicit knowledge through learning-by-doing in local firms. It may include exploitative learning, when the knowledge is related to the firm's current activities. It can be said that a lack of relationships with partners and low R&D intensity can lead the organization to exploit the knowledge. Thus, we propose:

Proposition 4: Firms with lower R&D intensity and lower rich relationships with MNEs are more likely to undertake experiential-exploitative learning.

CONCLUSION

This study has discussed the learning strategies that are available to local firms in their dealings with foreign MNEs operating in their markets, with a focus on developing-country environments. Although previous studies have highlighted the need for domestic firms to develop their capabilities in order to compete with MNEs in their local markets, little research has discussed the kind of learning that the domestic firms require (explorative or exploitative) and the processes available for undertaking the learning (experiential or cooperative) (Hitt et al., 2005). While prior research has discussed exploratory and exploitative learning, we add a consideration of learning procedures, in order to create a clearer understanding of the knowledge-creating employed by domestic firms, along with a consideration of two key aspects: the richness of firms' relationships with foreign MNEs operating in the market and the local firms' R&D intensity.

The framework presented in this study provides a basis for developing a deeper understanding of the learning strategies employed by local firms in developing countries. Most of the existing studies have focused on learning from MNEs in the context of either developed (Almeida, 1996; Jiménez, Benito-Osorio, & Palmero-Cámara, 2014; Lenartowicz, Johnson, & Konopaske, 2014; Ramamurti, 2012) or emerging countries (Islam, Jasimuddin, & Hasan, 2015; Ramayah, Ahmad, & Hong, 2012; Sun, Peng, Ren, & Yan, 2012; Zeng, Shenkar, Lee, & Song, 2013), or learning that happens between MNEs and their subsidiaries (Minbaeva, Pedersen, Björkman, Fey, & Park, 2014; Song, 2014).

However, the developing-country context is distinct, especially as local firms are quite likely to suffer from constrained resources, making knowledge about the allocation of scarce resources particularly salient¹. The entry of foreign MNEs into a developing market creates a new competitive environment, in which local forms have a strong incentive to try to learn and develop their abilities

¹ Of course, the developing country's policy environment also plays a role. Some nations provide policy incentives to both foreign MNEs and local firms, to encourage the learning process. We thank an anonymous reviewer for raising this point.

more quickly than their local competitors (Teece & Pisano, 1994). Under such circumstances, domestic firms may need to not only try to learn and absorb externally-generated knowledge, but also to rely on their own experience, especially when foreign partners are resistant to sharing their knowledge in a competitive market.

It may be difficult for firms to undertake both exploration and exploitation in their organizations, as these two approaches to learning involve different sources and processes (Stettner & Lavie, 2014). Therefore, managers of domestic firms in developing economies face the need to take difficult decisions regarding the allocation of resources between exploration and exploitation (He & Wong, 2004). The framework developed in this paper may assist managers in considering resource allocation, in terms of balancing their relationships with MNE partners and their spending on R&D

This paper aims to contribute to the literature in two ways. The first pertains to the context, as we consider the learning strategies available to local firms in developing countries, with the goal of providing a clearer perspective on how local firms may interact with MNEs and what factors may assist them in developing a better understanding of external knowledge. Second, we explain how richness of relationship and internal R&D can affect local firms' strategic choices with respect to explorative and exploitative learning. While other studies have focused on why it is difficult to balance between exploration and exploitation (Auh & Menguc, 2005; Kang & Snell, 2009; Yalcinkaya, Calantone, & Griffith, 2007) , we extend the literature by exploring the types of organizational mechanisms that may affect managerial decisions regarding exploration and exploitation.

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Figure1 Types of Exploration and Exploitation along R&D intensity and Richness of Relationship

Rel. R&D	Richness of relationship	
	(High)	(Low)
R&D Intensity (High)	P1: Cooperative-Explorative	P3: Experiential -Explorative
R&D Intensity (Low)	P2: Cooperative-Exploitative	P4: Experiential -Exploitative