MANAGING EXTERNAL AND CORPORATE EMBEDDEDNESS FOR VALUE CREATION

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Abstract
MNE subsidiaries bridge the corporate and external networks by being positioned between these two different networks. External resource ties are important for the development of the resource collection of a company (Håkansson and Snehota, 1995), while corporate resource ties allow the access to the knowledge residing in the other units of the corporation. Simultaneous access to these two different networks of knowledge may lead to innovation, since innovation is often created by trying out new combinations, which means bridging different types of gaps (Hoholm and Håkansson, 2012).

The aim of this paper is to understand whether the most important resources for the MNEs’ value creation are derived through embeddedness in corporate or external networks, or whether they are created by the focal unit itself. This paper examines the resource concept as described in the ARA model and extends Håkansson and Snehota’s (1995) resource tie matrix by adding a third dimension. In this dimension the resources are provided by corporate networks.

This research is a qualitative interview study, which is a follow-up for quantitative survey-based research conducted in 2008-2009. The initial survey-based research identified the aggregated resource flows between the MNE subsidiary and its corporate as well as external networks. The follow-up interviews will allow us to assess, review and monitor every main relationship of a company for its resource dimension (Håkansson and Snehota, 1995: 187). The interviews will increase our understanding of what types of resource ties lead to higher value added by the MNE subsidiary and furthermore, how these resource ties should be managed.

Keywords: Multinational enterprises (MNE), Subsidiary innovative performance, Resource ties, Dual embeddedness
INTRODUCTION

This paper examines industrial networks in the context of multinational enterprises (MNE). What differentiates MNEs from solely domestic companies, is that in addition to being ‘externally embedded’ within various industrial networks, MNE subsidiaries are also ‘internally embedded’ within the MNE corporate network worldwide in order to take full advantage of the opportunities in several countries (see, e.g. Meyer et al. 2011, Andersson et al. 2002, Castellani and Zanfei 2005). An integrated understanding of the interplay between external and corporate relationships is required when networks are examined (Ritter et al. 2004) because being dually embedded in external and corporate networks grants MNE subsidiaries a superior position to be exposed to new knowledge, ideas and opportunities available in these two networks (Andersson et al. 2002). This may lead to innovation, since innovation is often created by trying out new combinations, which means bridging different types of gaps (Hoholm and Håkansson, 2012).

MNE subsidiaries are examined in this paper because they connect the corporate and external networks by being positioned in between. According to Turnbull et al. (1996), the network position is both an outcome of past relationship strategy and a resource for future strategy. However, MNE subsidiaries are positioned between these two networks by default rather than actively having created the bridging position. In line with the early industrial marketing and purchasing (IMP) research I focus on dyadic relationships between two parties (Turnbull et al. 1996) by examining whether external or corporate resource exchange between the MNE subsidiary and its counterparts add more value for the MNE subsidiary. Hence, in line with Hoholm and Håkansson (2012), this paper takes an interaction perspective and examines the actual organizing and economic exploitation of external and corporate network resources when recombined by a MNE subsidiary. More specifically, this paper contributes to the resource aspect of the ARA model by analyzing the resource collection of the company (see Håkansson and Snehota 1995: 145).

Further research is encouraged to examine what it takes to recombine resources and activities across highly specialized industrial networks (Hoholm and Håkansson, 2012). While Hoholm and Håkansson (2012) examine bridging across different dimensions in regards to the development of an innovation within fish industries, in this paper we examine combining resources from two distinctively different networks; external and corporate. Managing resource ties in relationships between companies is important because they secure access and the transfer of existing resources as well as the development of new resources (Håkansson and Snehota 1995: 134). Although there is evidence that simultaneous resource ties and dual embeddedness leads to higher innovative performance of the MNE subsidiary (Figueiredo 2011), external and corporate network relationships have traditionally been examined separately (Ritter et al. 2004). To our knowledge only Almeida and Phene (2004), Cantwell and Mudambi (2004), Mudambi and Navarra (2004), Gammelgaard and Pedersen (2010) and Figueiredo, (2011) have addressed the external and corporate relationships simultaneously.

According to Almeida and Phene (2004), the innovative ability of MNE subsidiaries can best be understood by examining both the characteristics of the external and corporate contexts in which subsidiaries are embedded, and the relationships of the subsidiaries with other firms in these contexts. Therefore, this paper asks:

Are most valuable resources derived through MNE unit embeddedness in external or corporate networks, or within the focal unit itself?
Resource ties and dual embeddedness

Embeddedness is a relatively new concept since in the 1990s a well-defined theory of embeddedness and inter-company networks was still developing (Uzzi 1997: 41). Research on social networks has played a central role in developing organizational embeddedness research (Dacin et al. 1999). Modern research on embeddedness is based on Granovetter’s (1985) classic piece Economic action and social structure: The problem of embeddedness, in which he defines embeddedness as the contextualization of economic activity in ongoing patterns of social relations (Dacin et al., 1999). Uzzi (1997) differentiated network relationships between “arm's-length ties” and “close or special relationships” (Uzzi 1997: 41). Arm’s-length ties are market relationships with often non-repeated interaction in which social content of the relationships is lacking (Uzzi 1997: 41). Close or special relationships, on the other hand, are embedded relationships, which involve more proprietary and tacit information exchange than the price and quantity data that were traded in arm's-length tie (Uzzi 1997: 41). An optimal network structure for an organization to link to its network is through a mix of arm's-length and embedded ties, “because each type of tie performs different functions: Embedded ties enrich the network, while arm's-length ties prevent the complete insulation of the network from market demands and new possibilities” (Uzzi 1997, pp. 59). Hence, relationships and embeddedness should not be examined only as either absent or present, but as a continuous variable (Dacin et al. 1999, Håkansson and Snehota 2012).

In this paper we examine relational embeddedness, which stresses the role of direct cohesive ties through which actors gain fine-grained information (Gulati 1998). This stream is closely linked to the social or embeddedness arguments, and the sources as well as nature of interdependencies between actors are examined (Dacin et al. 1999). Those who share direct connections with other actors are likely to possess more common information and knowledge of each other (Gulati 1998). Taken to the context of MNEs, relational embeddedness refers to the extent to which a subsidiary’s individual, direct relationships with their customers, suppliers and other actors can serve as sources of learning (Andersson et al. 2002). Figueiredo (2011) further considers subsidiary relational embeddedness as a creation of capabilities through multiple linkages in order to achieve subsidiary innovative performance.

Embeddedness is a multidimensional concept, which can be divided to two levels: subsidiaries and relationships (Forsgren et al. 2005). The subsidiary level embeddedness characterizes the subsidiaries according to their highest embeddedness value of corporate and external relationships (Forsgren et al. 2005). In terms of resource flows, the total amount of resources contributed and received by the MNE subsidiary illustrates how MNE subsidiary managers can influence and take advantage of the dual network embeddedness. Those MNE subsidiaries that are resource contributors to corporate network have a stronger influence on the MNE strategic behavior and contrarily, corporate knowledge receivers have less influence within an MNE (Gupta and Govindarajan 1994). However, such examination of resource flows takes an aggregate level of analysis (resource flows are accumulations of many individual transfer projects) (e.g. Gupta and Govindarajan 2000), which makes it difficult to study how individual relationships lead to MNE subsidiary’s higher innovative performance and how they should be managed.

The relationship level embeddedness, on the other hand, evaluates each external and corporate relationship individually by ranking its embeddedness degree from none to very high (Forsgren et al. 2005). Recent international business literature defines embeddedness as mutual adaptation in product and production development (Andersson et al. 2007, Andersson...
et al. 2002, Forsgren et al. 2005) or knowledge-intensive linkages involving the exchange of knowledge (Figueiredo, 2011). Johanson and Mattsson (1987) also state that adaptations are important because they strengthen the bonds between firms, they reinforce the relationships to become more endurable, they indicate that there is some space for change in the relationships, and they develop mutual orientation. To a large extent, however, the adaptations occur through continuous processes as a result of day-to-day experiences. Hence, while relationships are often general and long-term, interactions represent the inter-organizational behavior in day-to-day exchange and adaptation processes (Johanson and Mattsson 1987). Hence, embeddedness is a two-way process, which involves influencing and being influenced by others through resource ties.

**Relationships and resource ties**

Johanson and Mattsson (1987) examine inter-organizational relationships in industrial systems, and define inter-firm relationships as a mutual orientation of two firms towards each other. The authors distinguish between relationships and interactions (see Figure 1). In broad terms, relationships form the context through which the interactions take place (Easton 1992) and no interaction, be it sale, purchase, advice, delivery or payment, can be understood without reference to the relationship of which it is a part (Håkansson and Ford 2002). Relationships rise via exchange processes among the parties, beginning with single exchanges that gradually build up a mutual trust (Johanson and Mattsson 1987). Interaction can also be referred as resource ties, which according to Håkansson and Snehota (1995) connect some of the resources of one company to some of the resources in another company. Companies become mutually and increasingly interdependent as the resource ties develop between the two companies (Håkansson and Snehota 1995). However, the authors specify that resource ties take time to develop so a radical short-term change in the resource collection is difficult to achieve.

**Figure 1.** Relationships and interaction in industrial markets (Johanson and Mattsson 1987)

Johanson and Mattsson (1987) specify that the exchange processes in interaction has a social element but they also have important technical, logistical, knowledge, administrative, and time elements. Furthermore, the process is an adaptation process when the parties meet problems and adapt to each other in terms of products and production processes, technical development, logistically by developing common delivery systems, administratively by modifying planning or scheduling systems, financially by agreeing on payments and
investments systems (Johanson and Mattsson 1987). Hence, innovative resource ties tend to emerge in relationships as new uses for resources are discovered and as new resources for actual purposes are developed (Håkansson and Snehota 1995). However, Hoholm and Håkansson (2012) propose that central questions are how groups of actors and resources become socio-materially embedded over time and are creating a network space, and how this produces the great difficulties of innovation, particularly on the more radical side. Although radical innovations often require increased specialization among the established partners, on the other hand, the specialization creates distance between them that need to be bridged (Hoholm and Håkansson 2012). A bridge is not just a new relation between two activities or two resources but a network of relations between a whole set of resources and activities (Hoholm and Håkansson 2012). The larger the distance, e.g. in terms of technology, work practice, and economic logic, the more difficult it is to bridge (Hoholm and Håkansson 2012).

**Duration of embeddedness**

MNE subsidiary relationship development is assumed to be driven by the type of operation in terms of products, markets and/or technology (Forsgren et al. 2005). However, Forsgren et al. (2005: 123) found that there are as much differences in the embeddedness between subsidiaries within one division as between a group of subsidiaries as a whole, which signals that industry, products, technology, etc. do not explain all the variations in embeddedness. The authors also found that the average age of the relationships is highly correlated with the MNE subsidiary embeddedness. Creating embeddedness is time consuming and, therefore, the age of relationships is an important indicator of embeddedness (Forsgren et al. 2005: 123). Håkansson and Snehota (1995) also praise the importance of the time and repetition features because stability in relationships between resource providers and users can be seen as a necessary condition for joint learning. New relationships are hard to establish especially during innovation and they are likely to be fragile due to a lack of intertwined interests and resources (Hoholm and Håkansson 2012). Hence, the relationship often begins with single exchanges that gradually build up a mutual trust between the partners (Johanson and Mattsson 1987) and therefore the duration of the business relationship adds an important longitudinal dimension to the study of business relationships and embeddedness (Giroud and Scott-Kennel 2009).

Easton (1992) emphasizes that researchers of the IMP group provided evidence of the stable long-term buyer-seller relationships and were able to characterize their richness and diversity. However, Gadde and Snehota (2000) call for more research on the extent of integration of relationships. They propose involvement as being a relevant concept that comprises the coordination of activities, adaptations of resources, and interaction among individuals (Gadde and Snehota 2000). Furthermore, inter-organizational relationships are thick, but an everlasting question remains how to measure and analyze them (Håkansson, Snehota 2012). In this paper we examine embeddedness by analyzing individual resource ties between the MNE subsidiary and its counterparts in external and corporate networks. In accordance with Johanson and Mattsson (1987) and Forsgren et al (2005), we analyze the mutual adaptation of product and production development between the MNE subsidiary and its most important external and corporate network counterparts. Examining individual network relationships allows us to understand how these resource ties should be managed in order to add the most value for the MNE subsidiary over time. Furthermore, when judging the subsidiary’s innovation potential, every major relationship of a company needs to be assessed, reviewed and monitored for its resource dimension (Håkansson and Snehota 1995). A detailed understanding of the knowledge flows is of the greatest practical importance since when the
subsidiary managers are well informed about the knowledge transfer processes, they will be able to design and implement mechanisms that can assist them in managing these processes (Michailova and Mustaffa, 2012). Figure 2 illustrates the research setting of this paper.

Figure 2: Research setting (modified from Andersson et al. 2002)

RESOURCES

The theoretical framework utilized in this paper derives from the Activity-Resource-Actor (ARA) model (Håkansson and Snehota 1995) with a special focus on the resource aspect. The ARA model acknowledges the linking activities, resources ties, and actor bonds (Håkansson and Snehota 2006), which are more or less overlapping (Axelsson 2010). Simply, the actors need to have access to resources (e.g. knowledge, production equipment, energy) to perform various activities (e.g. production, distribution, communication) that create value (Axelsson 2010), which lead to accumulating knowledge, creating new resources, and developing new activities (Harris and Wheeler 2005). Actors can be companies, units in a company or individuals but in extant IMP research they have often been companies, not so much individuals in companies (Axelsson 2010). Also in this paper the actors are companies or units of companies (subsidiaries), not individuals.

Resource ties and activity links are shaped in and by interaction (Hoholm and Håkansson 2012) and therefore the interaction between the MNE subsidiary and its external and corporate networks is particularly examined in this paper. The value of resources lies in their use potential so they can be tangible or intangible, material or symbolic, as long as they can be used (Håkansson and Snehota 1995). Resources can be considered as homogeneous, meaning that “their value will be independent of what other resources they are combined with when used” and “they have value in themselves” or heterogeneous in a sense that “their value depends on which other resources they are combined with” (Håkansson and Snehota 1995: 135). Due to the resource heterogeneity, the mix of resources explains more value than simply the amount of resources in a company (Håkansson and Snehota 1995).

Companies use, create and develop resources often together with other partners with whom the companies are embedded. Håkansson and Snehota (1995) consider companies as collections of heterogeneous resources in which a business relationship connects the resources of the two companies. The company can be a resource provider or resource user, or
both. Håkansson and Snehota (1995) identified four different types of resource ties, each of them can be found in every company’s collection. These four types are illustrated in a two-by-two matrix in Figure 3, which is divided to internal resource ties (the company itself) and external resource ties (i.e. customers) in terms of resource providers and resource users. The first scenario in the top left corner illustrates the situation where the resource is produced and used within the company. In this case the company has an easy access to resources but resource development might be challenging as the two sides determining the value of resources (the provider and the user) belong to the same company (Håkansson and Snehota 1995). Since combining different combinations of resources is more likely to lead to innovation (Hoholm and Håkansson, 2012) this first scenario is not likely to be the best in terms of creating innovations.

Figure 3. Resource matrix (Håkansson and Snehota 1995).

<table>
<thead>
<tr>
<th>Resource provider</th>
<th>Resource user</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td>Internal</td>
</tr>
<tr>
<td>e.g. own input</td>
<td>e.g. own input</td>
</tr>
<tr>
<td>resource, own</td>
<td>resource, own</td>
</tr>
<tr>
<td>developed equipment</td>
<td>developed equipment</td>
</tr>
<tr>
<td>External</td>
<td>External</td>
</tr>
<tr>
<td>e.g. bought equipment</td>
<td>e.g. bought equipment</td>
</tr>
<tr>
<td>components, etc.</td>
<td>finished products</td>
</tr>
<tr>
<td>supplier</td>
<td>combination of</td>
</tr>
<tr>
<td>relationships</td>
<td>supplier–customer</td>
</tr>
<tr>
<td></td>
<td>relationships</td>
</tr>
</tbody>
</table>

In the second scenario the resource provider is internal network and the resource user is external network (top right). Different external users may pull resource development (innovation) in different directions so selected potential users might have to be prioritized (Håkansson and Snehota 1995). Various external users may pull resource development, thus, innovations in too many different directions (Håkansson and Snehota 1995).

The third scenario, in which the resource provider is external and the user internal (bottom left), MNE subsidiary receives resources from the external network partners and the resources are used by the internal networks. Håkansson and Snehota (1995) specify that in this scenario, the companies need to secure the access to valued external resources by enhancing the joint control of them and have a good receptive ability to internalize them (Håkansson and Snehota 1995). Interaction between resources enables them to be “changed, recombined, and developed, used and re-used” (Håkansson et al. 2009, p. 66). However, having external resource providers does not automatically result in higher innovative performance due to bridging dilemma: the more specialized the partners are, the more difficult it is to bridge them (Hoholm and Håkansson 2012).
In the fourth scenario (bottom right) both the resource users and resource providers are external. Fourth situation is both more problematic and simpler for the focal company because the company needs to be the representative of the resource provider to the user and the user of the resources to the provider (Håkansson and Snehota 1995). The authors state that this double-sided situation is rather problematic because the company itself has no obvious role to play but on the other hand it gives the company a wide range of opportunities by combining the use and the production aspects in an open way.

“Resource ties that arise in business relationships are determinants of the innovation potential of a company” (Håkansson and Snehota 1995: 144). However, Håkansson and Snehota’s (1995) resource matrix only acknowledges resource providers to be either internal or external but not both. As was discussed earlier in this paper, extant research has shown that simultaneous dual embeddedness may lead to higher innovative performance of the MNE subsidiary (Figueiredo 2011, Almeida and Phene 2004) as long as the network partners are not too distant or specialized (Hoholm and Håkansson, 2012). Also Håkansson and Snehota (1995: 187) acknowledge that a broad and diverse resource base brings better conditions to develop the company’s capabilities. The authors emphasize the importance of external resource ties because they provide access to resources that are needed to complement the existing resources (Håkansson and Snehota, 1995: 190). Internal resource ties, on the other hand, may be beneficial but tend to limit the flexibility in coping with changes generated elsewhere in the resource arrangements (Håkansson and Snehota, 1995: 190).

In this paper we extend Håkansson and Snehota’s (1995) resource matrix by adding one more dimension, corporate, in which resources are provided by other units of the MNE. In that case the focal unit itself is not sufficient to provide the most valuable resources so it needs the support of other units of the MNE. The fifth scenario in Figure 4 illustrates the situation where the resource is produced by other units of the company and used internally. In this case the focal unit receives input from the corporation for developing products or services for their own use. Scenario 6, on the other hand, indicates a situation where the corporate resources are used to create products or services to external users.
We utilize Håkansson and Snehota’s (1995) resource matrix in analyzing whether the source (provider) of the most valuable resources is other units of the MNE (corporate), the focal subsidiary itself (internal) or other companies (external). We make a clear distinction that corporate embeddedness refers to resource ties with other corporate units (subsidiaries and headquarters) within the MNE. Internal embeddedness refers to resources developed internally in the MNE subsidiary. External embeddedness, on the other hand, refers to resource ties with other companies such as suppliers, customers and other business partners. The matrix allows us to examine our research question (*Are most valuable resources derived through MNE unit embeddedness in external or internal networks, or within the focal unit itself?*). We analyze what kinds of resources are exchanged via MNE subsidiary’s internal and external resource ties and which ones are the most valuable to the company.

**RESEARCH METHOD**

This research is a qualitative interview study, which is a follow-up for quantitative survey-based research conducted in 2008-2009. The initial survey-based research identified the aggregated resource flows between the MNE subsidiary and its corporate as and external network, including suppliers, customers and other business partners. The survey was sent to top executives of 500 largest companies in Finland. Among 85 respondents 20 were foreign MNEs operating in Finland, 40 were national (Finnish) MNEs, and 25 were solely domestic companies. The case companies for the current study are selected among the respondents of the initial survey.

Through qualitative interviews we can have an in-depth understanding of the selected foreign MNE subsidiaries’ resource ties. As suggested by Håkansson and Snehota (1995: 187), we assess, review and monitor every main relationship of a company for its resource dimension. The interviews will increase our understanding of the types of resources being exchanged in the most important dyadic relationships between the MNE subsidiary and its external and corporate network partners.
ANTICIPATED RESEARCH FINDINGS

The interviews are yet to be conducted so results discussed here are anticipated based on the survey study preceding this in-depth research.

The results of the survey study suggest that those MNE subsidiaries that are strong in innovations in terms of having high R&D spending are most likely to be dually embedded in external and corporate networks. However, the survey does not reveal how resources from the external and corporate sources differ and whether one or the other source is more valuable for the MNE. The interviews will enlighten this aspect.

The survey results also suggest that foreign MNE subsidiaries are likely to receive resources from corporate networks and contribute them to external networks. Hence, they follow scenario 2 (top right corner) of Figure 3. This suggests that foreign MNE subsidiaries are beneficial to local firms in terms of having high resource outflows. According to the survey, autonomy as well as host country advantages (local market, knowledge infrastructure and R&D expenditure) are negatively related to bridging the corporate to external networks. This suggests that the less favorable the host country is for doing business, the more the MNE subsidiaries need to put effort on the customer relationships to have external resource users.

CONTRIBUTION

As mentioned in the beginning of this paper, extant research has been criticized for not investigating the simultaneously dual impacts of corporate and external network embeddedness over time. Also Håkansson and Snehota’s (1995) suggest that one aspect of resource management is the possibility to exploit the various resource ties in relationships to different counterparts in order to enhance the development capabilities of the company. External resource ties are important for the development of the resource collection of a company (Håkansson, Snehota 1995), while corporate resource ties allow the access to the knowledge residing in the other units of the corporation.

This paper extends the resource aspect of the ARA model in order to understand what types of resource ties lead to higher added value and furthermore, how dual embeddedness should be managed. The resource tie matrix by Håkansson and Snehota (1995) examines the company’s innovation potential. However, it only examines resources received from external or internal sources. Our research contributes to the resource tie aspect of the ARA model in terms of developing Håkansson and Snehota’s (1995) matrix so that it also includes a third dimension, which examines the situation when resources are provided by other units of the MNE.
REFERENCES


