
Guest editorial

Networks: relationships and innovation

Over the past three decades, the IMP Group has transformed our understanding of inter-firm networks and their roles in international operations (Ford and Håkansson, 2006; Michel *et al.*, 2003; Håkansson and Snehota, 2000; Johanson and Mattsson, 1994; Welsh and Wilkinson, 2004). The network approach has traditionally focused on the structural and behavioural implications of interaction and relationships. Interaction determines and explains the motives and driving forces that shape the firm and individual behaviour of different actors in the network (Håkansson, 1982; Håkansson and Ford, 2002; Håkansson and Snehota, 1995). By understanding network relationships and structure, we can determine the veiled forces within the structure of an industry, the level and intensity of competition, the position of different firms within a specific value chain and how companies behave and manage relationships in different market environments (Håkansson *et al.*, 2009). In addition, relationships and their interactions contribute to the continuous network dynamic which drives future innovation in the market (Axelsson and Easton, 1992).

Relationships are as old as the human race. Some of these relationships are social; others are emotional, personal or business. Personal relationships can affect business relationships and vice versa. As much as we try to differentiate between business and personal relationships, they are all intertwined, constantly changing and evolving (Veludo *et al.*, 2006). Blois (1998) argues that it is counter-intuitive to think that a firm has a choice whether or not to have a relationship: all firms have relationships. The IMP Group goes further by stating “[. . .] a company cannot exist without relationships” (Ford *et al.*, 2003, p. 37). No company is an island: each is locked into a complex network of relationships with suppliers, customers and other business stakeholders (Brennan *et al.*, 2011; Håkansson and Snehota, 2006; Blois, 1998).

However, not all relationships are equal and vary in terms of content, strength, time and importance (Brennan *et al.*, 2011). A firm's relationships with its customers, suppliers and stakeholders may be either an asset or a constraint (Håkansson *et al.*, 2009). Thus, scholars in the field argue that the management of relationships is a critical task for business entities (Ford *et al.*, 2003; Turnbull *et al.*, 1996; Ellis, 2011), particularly when relationships are considered strategic. Relationships can be perceived as assets because they provide access to resources, information and, if required, the provision of solutions to customer problems which lead to profit generation (Donaldson and O'Toole, 2007).

Many studies have underscored the importance of buyer-seller relationships and the contribution they make to overall business performance (Håkansson and Snehota, 1995; Ford, 2002). However, managing relationships is not an easy task, which becomes even more complex when trying to manage relationships across borders. In these situations, there are additional cultural and institutional factors that influence the

interaction process and, thus, the building and maintenance of enduring long-term relationships between the actors. In addition to the complexity of aligning the structural and procedural side of the relationship, there are interpersonal variables such as trust and commitment that act as the cement that binds the relationship (Abosag and Lee, 2013; Wang *et al.*, 2008).

All firms need resources, and, to access those resources, firms are dependent on the relationships with suppliers and their customers. Resources come in three types:

- 1 operational resources;
- 2 technological/know-how; and
- 3 relationships with other actors (Ford *et al.*, 2003).

These resources are accessed through the firm's relationships with others. Relationships also act as an instrument to combine the firm's own resources and activities with others to form new resources and, thereby, achieve innovation. Hence, a company's relationships with other entities are integral for its own innovative offerings and that of their counterparts (Laage-Hellman, 1997).

Innovation, which is embedded in the network surrounding a firm, is essential for the long-term survival of the firm (Siu and Bao, 2008). Innovation occurs through the interaction among the network of heterogeneous actors in the network, such as suppliers (Song and Thieme, 2009), customers (Coviello and Joseph, 2012), competitors (Amaldoss and Rapoport, 2005), manufacturers and lead users (Fichter, 2009). Through the process of interaction, these actors learn to recognise opportunities, evoke new ideas, identify problems and create knowledge. The interaction through innovative activities allow firms to acquire resources and boost collaboration for value co-creation (Chen *et al.*, 2011) and accelerate growth and profitability (Berry *et al.*, 2006).

This special issue is made up of nine papers. The papers are broadly grouped under two main themes:

- 1 relationships in networks; and
- 2 innovation in networks.

We believe the papers presented herein make a relevant contribution to the IMP research paradigm and contemporary issues in international business.

Relationships in networks

Relationships and networks have been analysed through different theoretical lenses and methods which invariably leads to different results and conclusions (Ritter and Gemünden, 2003). Relationships exist between different types of actors and are seen as being instrumental in accessing and controlling resources (Pels *et al.*, 2009). Moller and Halinen (1999) describe relationships in networks as being interdependent and often reciprocal, where the interactions between buyers and sellers lead to mutual dependence and higher switching costs. Research evidence indicates that business relationships and their subsequent networks are diverse and complex (Veludo *et al.*, 2006). This complexity gives different meaning and substance to each

relationship that is analysed (Hakansson and Snehota, 1995; Ritter *et al.*, 2004).

The extant literature has classified relationships into two types:

- 1 hierarchical relationships, while others are more; and
- 2 symmetrical, giving them a more relational nature, such as partnering or collaborative relationships (Ford, 2002).

However, Ritter and Gemünden (2003) argue that research on relationships is fragmented.

In a similar vein, little is known about the transfer and applicability of the IMP concepts in the Asian region (ALHussan *et al.*, 2014). No doubt, business networks in this region differ sociologically, institutionally and economically from inter-firm networks in the western world. What is immediately apparent in Asia is that personal relationships govern social and economic activities (Jansson and Ramstrom, 2005). For firms to compete and sustain their position in the Asian market, they need to adjust their relationships with partners and adapt to the institutional and cultural constraints (Barnes *et al.*, 2010; Ashnai *et al.*, 2009). Each of the following papers contributes to our understanding of relationships in networks in diverse business contexts.

In their conceptual paper, Nystrom, Ramstrom and Tornroos (this issue) focus on understanding how firms strategize to influence their network role and position. While network position is influenced by the firm's connectedness and relationships with other firms in the network, roles develop through learning, sense-making, commitment and adaptations. Drawing on institutional theory, interaction and sense-making, firms influence each other perceptions of the roles and the position they occupy in the network, which influences not only the firm's access to resources but also its ability to influence the network.

Acknowledging that institutionalisation both empowers and constrains individual actions, Theingi, Theingi and Purchase (this issue) explore the institutional factors impacting on formal and informal channels for cross-border remittances between Myanmar and Thailand. Despite the higher cost, the lack of any records and the potential risk of default, migrant workers in Thailand prefer to use informal channels for the repatriation of funds to Myanmar because of the high levels of trust and social capital that have been established after many repeat transactions and the convenience, both for the senders and recipients of the funds. As many migrants have entered Thailand illegally and many have difficulties in both speaking and writing in a foreign language (Thai), institutional barriers encourage and support the continuation of the informal channels.

Kobayshi, Yoritoshi and Tetsuya paper (this issue) focus on the interaction between the three dimensions of trust – cognition, affection and institutional trust when a firm expands in a foreign market. The findings from the study suggest that institutional-based trust develops first, which is then followed by a combination of cognition- and affection-based trust.

Hiroyuki and Zolkowski (this issue) investigate the transfer of knowledge between an American MNC and its subsidiary in Japan. The authors propose a framework that combines knowledge, absorptive capacity, disseminative capacity and the strength of relationship ties. Where the capacity to disseminate knowledge is impeded by language barriers, cultural differences

and the lack or absence of prior knowledge, strong interpersonal relationships may mitigate some of the ineffectiveness caused by the sender's low dissemination capacity and the recipient's low absorptive capacity.

ALHussan, AL-Husan and Alhesan (this issue) describe the role of senior managers in managing relationships with key customers in an Arab context. Given the importance of personal relationships and the desire by customers to communicate with senior executives, the direct involvement of senior executives in key account management supports both the customer and the key account manager. Furthermore, in a very hierarchical society which gives priority to family over organisational objectives, social interactions are more important in building trust and commitment with key customers. A hands-on approach is imperative when dealing with Arab key customers, as it signals the importance and respect towards the key account holder which is a necessity in high power distance societies.

Innovation in networks

Business success lies in its ability to innovate. The drivers to boost innovation are associated with diversity, capability, resources, inter-dependence, participation, idea generation and decision-making (Iturrioz *et al.*, 2015; Kazadi *et al.*, 2016; Van Riel *et al.*, 2004). In business networks, firms are both value input and value output stakeholders in the co-creation process as “firms are inter-dependent in their innovation activities” (Tether and Tajar, 2008, p. 722). Firms align both their internal and external networks to contribute to innovation through the process of resource acquisition, activity coordination and cooperation, as well as bridging relationship linkages (Aarikka-Stenroos *et al.*, 2014; Iturrioz *et al.*, 2015; Tether and Tajar, 2008).

Innovation has been broadly categorised into two domains: technological and non-technological innovation (Geldes *et al.*, 2016). Technological innovation stresses product integration and process methods, whereas non-technological innovation highlights market, service and organisational innovation. Past innovation studies have concentrated on technological innovation through product integration and process delivery (Atuahene-Gima, 2005; Story *et al.*, 2009). Non-technological innovation supplements and complements the standard concepts of product and process innovations (De Vries, 2006; Gallouj and Weinstein, 1997).

Innovation within networks raises new challenges because of the complex network structure, the diverse set of actor roles, and the combination of interests and goals among the actors involved (Klerkx and Aarts, 2013). The interaction dynamics for innovation in networks draws attention to “what” innovative activities are developed, “how” the process evolves and “who” drives the functional operation. Each of the following papers contributes to our understanding of innovation in business networks.

When business actors drive their innovative activities to co-create unique knowledge, assess complementary resources or integrate different capabilities, as the network expands it also presents challenges. Munksgaard, Christensen, Bang and Jensen (this issue) differentiate between supplier-driven innovation and user-driven innovation to provide insights into Danish suppliers' abilities to actively engage in customers' innovations in

business-to-business networks. The multiple case studies identify challenges and opportunities in the global production system, highlighting the role of suppliers in bridging and expanding upstream and downstream spaces for action across diverse organisational, technological and managerial domains. Their findings disclose the problem of supplier-driven innovation: the need for early involvement in customers' projects to co-create attractive offers and the ability to include knowledge and capabilities residing in the upstream network of suppliers to qualify and generate relevant matching solutions.

No single firm is capable of developing innovations internally and in successfully managing commercialisation. Various elements for innovation in the network are brought together by creating and putting into action a sequence of activities and processes that may meet with some resistance. Purchase, Kum and Olaru (this issue) analyse technical and commercialisation paths for an innovation trajectory. Their findings provide insights into how decisions and events lead to changes in paths and trajectories through a single case study of an Australian university spin-off organisation within the renewable energy sector. Their qualitative study categorizes the critical decision paths into technical and commercialisation, introduces a more detailed typology of events and finds that lock-in events influence the direction of an innovation trajectory. The significance of temporal processes reveals the fragile balance in contrasting convergence-divergence patterns in the trajectory, depending on the types of events that occur. Their contribution provides a new typology of events and paths by identifying and characterizing lock-in events. This study allows industries to monitor the technical and commercialisation paths as a strategy to reduce "vulnerability" within the innovation trajectory and to minimise possible negative impacts.

Faroque, Morrish and Ferdous (this issue) explore a South Asian low-technology industry to provide new insights into how the impact of international new ventures (INVs) affects export performance through process innovations in Bangladesh. Their framework is developed from the network literature which identifies both personal and inter-firm networks as contributing to competitive advantage. Their findings reveal that both the entrepreneur's personal and inter-firm network enhance process innovativeness and directly benefit export performance. However, organisational process innovativeness only mediates between an INV's inter-firm networking and its export performance.

Relational resources foster innovation in business networks. Fletcher-Chen, AL-Husan and ALHussan (this issue) investigate how trust and relationship effectiveness as relational resources create service exploration activities and develop service exploitation activities in emerging markets. Their key findings reveal that relational resources mediate both collaborative communication and constructive conflict to reinforce service exploitation activities within an existing network. Relationship effectiveness mediates both collaborative communication and constructive conflict to broaden service exploration activities within the external network. The study provides a framework for the more comprehensive integration of relational resources in a non-technological innovation.

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