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INCORPORATING INTER-FIRM SOCIAL CAPITAL INTO INTERNATIONAL BUSINESS THEORY

ABSTRACT

This paper explores and provides an understanding of how B-to-B relationships can be better understood by incorporating a social capital (SC) framework. It argues that SC dimensions (i.e., relational, cognitive and structural), underpin alliances that are salient to international business (IB). A synthesis of the literature on B-to-B SC and loyalty into a single, process-based framework is established, together with institutional texture insights for firms to harness and develop for success. The central argument is that investments in relationship building not only enhance B-to-B loyalty but over time fashion the nature and depth of the alliance for the international firm. The paper adds to the literature on international B-to-B collaborations whilst having the potential in providing managerially relevant ("actionable") results in 'how' and in 'what way' B-to-B SC can be harnessed in the 21st century IB system.

Key Words: social capital, international business, inter-firm (B-to-B) collaborations, loyalty

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INTRODUCTION

International business (IB) research is increasingly focusing on intra and inter-firm coordination with Matthews (1999), Peng (2003), Buckley (2011) and Dunning (2015) calling for closer specification of how institutions facilitate and underpin cross-border trade and investment. This international system of production that emerged in the late 20th century is becoming increasingly institutionally based, rather than purely market transaction focused. The emerging business environment is well captured in the term global factory, where changes in managerial style and innovations are essential to warrant success in a highly competitive global economy. Here, the evolution of the global factory requires managers to have a greater understanding whilst acting as co-ordinators across the system of internationally inter-connected firms (Buckley, 2011).

Institutions matter, but how? The point of departure taken in this article is to expand on the current understanding of IB institutions by incorporating the formation of social capital (SC) into the specific and important challenge of business-to-business (B-to-B) institution building. It will be argued that the accretion of SC through relationship building (and nurturing) is central to the formation of networks for and between firms. In a sense an SC framework can better accommodate B-to-B institutions, relationships and transactions than an institutional perspective alone.

The outline of this article is as follows: The literature on B-to-B and SC relationships will be reviewed focusing on how SC allows businesses to harness and develop for success. A conceptual model is then proposed which argues that SC influences loyalty intentions through the network of relationships (structural dimension of SC); quality of those relations (relational dimension of SC); and the shared beliefs of the relationship partners (cognitive dimension of SC). Particularly important is SC's unique feature associated to other forms of capital as SC is inherently bound with the organization and development of the business (Walker, Kogut, and Shan, 1997; Nahapiet and Ghoshal, 1998; Moran, 2005). The paper ends with a proposed research agenda that could bring together a wide range of measures that have been applied in marketing and IB literature and answers the call for closer qualitative examination of B-to-B SC relationships.

B-TO-B IN THE CURRENT INTERNATIONAL BUSINESS MARKETPLACE

Inter-firm (b-to-b) strategy, institutions, and transaction costs in international business: the traditional view

What drives firm performance and strategy in International Business (IB)? What governs the success and failure of firms (and B-to-B relationships) around the world? Traditionally, the IB literature outlines two perspectives; an industry-based view, which argues that conditions within an industry, determine firm strategy and performance (Porter, 1980), and a resource-based view, which suggests that it is firm-specific differences that drive strategy and performance (Barney, 1991). These observations are principally in the field of strategic management.

Given how the 'new institutionalism' has progressed in social sciences in past years (North, 1990; Oliver, 1997; Williamson, 2000; Hall and Soskice, 2001), the notion that 'institutions matter' is hardly novel. What is intriguing though (Smith, 2006) is how and it what way it matters. This is reinforced by Narula (2006) who posit that the 'process of globalization requires us to develop, modify and improve the available theoretical and conceptual frameworks that the IB literature provides us'.

There is already much study of the institutional responses of firms to these changes in the global marketplace. In particular the use of strategic alliances, defined by Gulati (1998) as 'voluntary arrangements between firms involving exchange, sharing, or co-development of products, technologies, or services...occurring as a result of a wide range of motives and goals, [and taking]...a variety of forms...across vertical and horizontal boundaries', are now a universal phenomenon and their propagation has led to a rising stream of research by strategy and organizational scholars who have examined the partnership processes, causes and outcomes, mostly at the dyadic level (Auster, 1994).

As is well-known in the literature, B-to-B partnerships are set across a continuum, ranging from minimal inter-firm connections except that which is explicitly contracted for on a transaction by transaction basis (for example, an foreign export agent that connects an offshore firm with domestic clients) all the way to deep, equity-based firm links, such as jointly owned strategic alliances and partnerships (Peng, 2003). On either end of the continuum, the concept of B-to-B does not really apply since there is no collaboration with an outside entity at all. But where there is cooperation between two or more separate businesses, whatever such collaborations entail, they are typically seen by both academics and businesspeople in transactional terms, positing that an alliance (or any other related

inter-firm coordination mechanism) is a matter of benefits versus costs. If net benefits become negative for too long the alliance will suffer or even fall apart.

However, there are many examples where one party benefits much more from a relationship than the other, yet it still carries on. A case in point would be in the Apple and Foxconn relationship. The Apple-Foxconn business partnership was outlined by Chan, Pun, and Seldon (2013) as being highly unequal. The competitive advantage that Apple has lies in the combination of corporate leadership, technological innovation, design and marketing (Lashinsky, 2012) whilst its financial success lies primarily from the hard-nosed management of production of its suppliers who are mainly based in Asia. As a result Apple's volume, coupled with ruthless business dealings allows them to take advantage of its suppliers (Satariano and Burrows, 2011). In this instance Foxconn accommodated Apple's squeeze while continuing to reduce labour expenditures, including cuts in wages (mainly overtime premiums) and benefits (Gulati, 1998). This collaboration is mostly financial, based upon transactional cost economics, and demand-responsive. But the value of the relationship and its corresponding repercussions to its business partners (i.e., Foxconn), though secondary, does seem to have some independent value, enough so that even with rather blatant inequality it has proven to be resilient.

Certainly the economic motivations for most business alliances are paramount. Firms don't form alliances as symbolic social affirmations but base these alliances on strategic complementarities that are offered to each other. Yet it could be that the conditions of mutual economic advantage are necessary but not sufficient for inter-firm (B-to-B) alliance formation. Gulati (1998) had postulated that firms entering alliances face considerable 'moral hazard' issues because of partner behaviour unpredictability and the likely costs from opportunistic behaviour. This is the case with the Apple-Foxconn alliance. Here Apple is behaving opportunistically and although Apple's partnership with Foxconn is somewhat efficient, the literature suggests that having a better relationship can enhance this efficiency (Lashinsky, 2012; Chan, Pun, and Seldon, 2013).

The concept of 'somewhat efficient' (mentioned above) is an important one. Hagedoorn and Duysters (2002) argued that the selection of partners representing profit maximising entities is optimal only in a static environment. Kay (1997) however explains that it is necessary to engage in networks with certain firms not because they trust their partners, but in order to trust their partners. Thus transaction cost economics and related theories (such as internalisation theory) cannot always be utilised as a complete explanation for international activities, especially in a dynamic setting. This is more so as human

characteristics such as trust and bonding are not fully captured. This is where the SC concept can be useful both in theoretical understanding and in business practice.

The social capital concept and business

The literature reveal over 19 definitions of social capital (Knoke and Kuklinski, 1982; Coleman, 1990; Burt, 2000; Adler and Kwon, 2002; Moran, 2005; Krause, Handfield, and Tyler, 2006; Eklinder-Frick, Eriksson, and Hallen, 2014) with the differences relating mainly to whether social capital (SC) is analyzed within an organization, in partnerships amongst organizations and their external actors, or both.

Overall the consensus is that relationships, whatever their specific form (e.g., strategic alliance) are an essential part and a critical dimension of SC, with SC itself existing as an independent intangible asset arising from such relationships. SC can be said to be the goodwill established to facilitate action (Adler and Kwon, 2002) while it is the interacting members who facilitates the reproduction of this social asset (Bourdieu, 1985; Portes, 1988; Putnam, 1995; Lin, 1999). Therefore, SC is an important resource because individuals work together more efficiently when they know one another, understand one another, as well as trust and identify with one another. In this sense SC is a supplement to transaction costs management in business setting, both because it lowers costs (genuine trust is lower cost than enforcement without trust) and by creating an 'asset' that has independent value that can withstand unforeseen events better.

SC derived from business relationships has been shown to impact bottom line results (Cohen and Prusak, 2001; Jones and Taylor, 2012) and as such an understanding of SC's nature is essential as a key element of a firm's competitive advantage. Further, a primary factor of successful relationship and SC building is a dedication to work towards mutually beneficial relationships. Therefore, the development of B-to-B SC is affected by the dynamics of actors between businesses, and thus can limit or enhance any advantages that that SC renders. In the best case, SC can create a virtuous circle whereby solid trust builds SC which deepens trust which further enhances SC. SC is also differentiated by sociologists and organizational theorists into various dimensions: structural SC - the number of ties between relationship partners (Burt, 1992); relational SC the strength of relationship or the quality of an actor's personal relations (Granovetter, 1995); and cognitive SC - the shared beliefs of the relationship partners (Nahapiet and Ghoshal, 1998).

Structural SC includes social interaction and is embedded in components such as social dimension ties, network connection consequences and strength, and network density. In

essence, it is fundamentally the extent to which businesses are connected. The relational dimension of SC is the quality of B-to-B relationships and stems from relationship-reliant consequences. It essentially describes the relationship strength developed by network members through a history of interactions (Nahapiet and Ghoshal, 1997). The cognitive dimensions of SC are characteristics of the environment, embedded in person-related intangible skills where businesses work together for the common good. It is the extent to which their social networks share a common goal in the areas of beliefs, interests, values, language, norms of behavior, and systems of meaning (Nahapiet and Ghoshal, 1998). Cognitive SC is also rooted in the study of communal relationships and sociology where common goals assist in facilitating collective behaviors.

In summary, the literature suggests that the relationship strength and shared beliefs typically result in higher SC. In a business setting this may result in improved performance and competitive advantage, though obviously these outcomes depend on many other factors. Moreover, research has posited positive effects relating to commitment, closeness of relationship (which is relational SC proxies) on loyalty-related outcomes (Barnes, 1997; Bansal, Irving, and Taylor, 2004). It is based upon the above that the three SC dimensions will be used as a key construct to reflect how they contribute to the study of B-to-B SC relationships in the IB context.

Social capital and inter-firm (B-to-B) relationship

Several studies have explored the importance and effectiveness of social embeddedness on the formation of inter-firm (B-to-B) cooperation. For instance, studies have used the social network of prior B-to-B alliances to show that those with more prior alliances were more likely to enter into new alliances. They did so also with greater frequency (Kogut, Shan, and Walker, 1992; Gulati, 1998). Similar findings have also been reported for the influence of firm alliance include alliance networks among bio-technology firms, semi-conductor firms and their patent citation networks (Podolny and Stuart, 1995), and those of top management teams of semi-conductor firms (Eisenhart and Schoonhjoven, 1996). Each network highlights a different underlying social process that enables central firms to enter alliances more frequently.

As far as B-to-B alliances breaking down, the literature shows that B-to-B partnerships with a prior history of ties were less likely to terminate their collaboration (Kogut, 1989). In another important set of studies, Levinthal and Fichman (1988) and Seabright, Levinthal, and Fichman (1992) determined that the duration of exchange relationships is not only

influenced by changes that occur in task conditions, but there may be dyadic attachments' between firms that lead to the persistence of such ties. Marketing and strategy scholars have also resorted to extensive studies administered to the individual managers responsible for the alliance from each partner (Heide and Miner, 1992; Parkhe, 1993). Such approaches enable the collection of a host of measures, subjective and objective, on which the B-to-B alliances can be assessed.

The theoretical underpinning of these findings goes as follows. Firms are embedded in a social structure of dependence that can possibly alter the power dynamics in a potential alliance. Partnering firms are also likely to have greater confidence (and trust) in each other, whilst the network creates a natural deterrent for bad behavior that will damage reputation. Trust enables greater exchange of information, promotes ease of interaction and facilitates a flexible orientation on the part of each partner. These can create enabling conditions under which the success of an alliance is much more likely (Gulati, 1998). Such social structures can limit opportunistic behaviors (as with earlier noted Apple-Foxconn alliance) leaving firms to be more willing to make non-recoverable investments, which in turn enhance alliance performance. Survey-based evidence also further confirms that both interpersonal and B-to-B level trust can be influential in the performance of exchange relationships (Zaheer and Zaheer, 1997).

Also, while there have been several efforts to explore differences in embedded ties between firms, studies don't directly assess whether embedded ties perform any better than other ties. Also, while embedded ties differ from other ties, we have less understanding of the extent to which alliances, with embedded ties, actually perform better or worse than other alliances and why. Research of B-to-B relationships have primarily focused on the implications of embeddedness, yet the social and economic contexts in which firms are embedded on their choice of alliances remains underexplored. There may also be implications from the embeddedness of firms in other types of social networks that could influence the design of alliances, but this has yet to be examined (Kogut, Shan, and Walker, 1992; Gulati, 1993, 1997).

A key consideration in operationalizing all this research would be to focus directly on the ways social networks (through social capital dimensions) play a role and whether the extent of embeddedness in social networks is an important factor. While there have been advances in assessing these B-to-B alliances, few of these efforts have considered the impact of social networks (and relationships), specifically through SC dimensions (Medline, 2004). As such, there has been considerable interest in uncovering the processes that underlie the

development of B-to-B alliances, something that would allow firms to anticipate such conditions and modify the structure of their relationship accordingly (Powell, Koput, and Smith-Doerr, 1996).

TOWARDS A CONCEPTUAL FRAMEWORK

The model shown in Figure 1 reflects a causal ordering derived from the literature reviewed and considers inter-relationships between various SC dimensions and linking them to key aspects of B-to-B collaborations. This continuum draws from research in the field of relationship marketing (Dwyer, Schurr, and Oh, 1987; Crosby, Evans, and Cowles, 1990) in which the aim is to strengthen existing relationships whilst increasing loyalty (Berry, Parasuraman, and Zeithaml, 1996). In addition, social network theory and social exchange theory are used a basis for the model as synthesizing these theoretical perspectives enables the evaluation of synergies among the SC dimensions (structural, cognitive and relational) and loyalty. It is also aimed at supporting the premise that B-to-B loyalty derive from the number of B-to-B ties, the authority of the communication portfolio, and the interaction amongst partner organisations (Morgan and Hunt, 1994). In social network theory (Easton, 1992) relationships are defined as long-term between firms. Also, as B-to-B exchanges often entail relationships and fall within the continuum of organisation communication, social network theory provides insight into "missing" drivers of relationship loyalty between Bto-B organisations (Siguaw, Simpson, and Baker, 1998). Incorporating social network factors into firms' alliance behaviour also provides a more accurate representation of key indicators which influences strategic actions of firms, and this has implications for managerial practice, which has so far been underexplored.

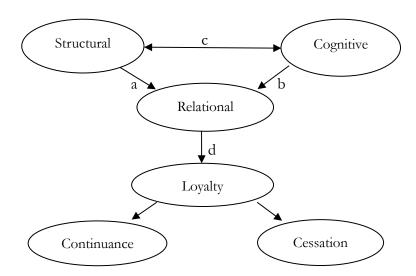


Figure 1. Proposed B-to-B SC model

In addition, the agency theory approach has also been applied to examine the special relationship that binds B-to-B partnerships as this has been argued to be a useful first step in diagnosing opportunities to advance co-operative behaviours (Ellis and Johnson, 1993). Agent theory advocates that organizations enter into a relationship because of the benefits of specialization and as a means to control risk (Logan, 2000). Lastly, Business Action Theory (BAT) is incorporated as it builds on communicative action theories and business relationship theories (Goldkuhl, 1995). This theory suggests that business processes are divided into six phases, starting with business prerequisites and goes through business communication (with e.g., offers, inquiries, negotiation and contract) to fulfilment (through delivery and payment) and ends up with the satisfied usage or discontent and possible claims. The phases are made up from identification of different generic business actions of communicative and material character. Business Action Theory not only stresses relationships and interaction but there is a clear inspiration from the B-to-B sector, where the emphasis is in the exchange character of making business. According to BAT, established relationships are created through a continuous interaction and such relationships are sustained (and gradually changed) through business interaction involving all phases of the business process.

In Figure 1, the SC dimensions of structural, relational and cognitive arrows represent causal effect and direction. In other words the arrows between each dimension proposed

influence lines between one factor and another in a causal direction. Each arrow in the figure indicates a causal relationship and each one is lettered with a corresponding table describing the nature of the relationship and the relevant theory it is grounded in.

Table 1 describes the association of structural and relational SC. This is evident in research conducted in relation to weak and strong ties (Granovetter, 1973) and the association between this and relational SC stems from recent studies on customer-employee rapport (Gremler and Gwinner, 2000). The study found that a series of interactions (structural SC) are associated with a personal connection (relational SC). It also follows studies in social network theory which suggest that structural SC is a driver of relational SC (Siguaw, Simpson, and Baker, 1998; Lin, 1999). For example frequent interactions (structural SC) are often closely associated with trust and commitment (relational SC) in the psychology literature (Fehr, 1996). Hinde (1979) also suggests that frequency of interaction and duration of relationship (structural SC) are highly cited reasons for strong relationship development (relational SC).

Table 1. Relationship between structural and relational SC

Relationship	Theory	References
a (structural SC→ relational SC)		
Series of interactions (structural SC) are associated with a personal connection (relational SC).	Weak and Strong ties	Granovetter (1973)
Structural SC is a driver of relational SC. (i.e., frequent interactions (structural SC) are often closely associated with trust and commitment (relational SC) in the psychology literature.	Social Network Theory	Lin (1999) Siguaw, Simpson, and Baker (1998)

Table 2 describes the association of cognitive and relational SC and this initially stems from research pertaining to friendships, partnerships and relationship marketing (Berry, 1983). Here, studies have suggested that cognitive SC is an antecedent to relational SC (Burke and Reitzes, 1991). Moreover, close relationships are often formed within communities where the presence of shared meanings and norms (cognitive SC) allow for stronger ties (relational SC). Agency theory and research in psychology also suggests that relationship strength is more likely to develop sooner within groups than with outsiders

(Ellis and Johnson, 1993; Logan, 2000) and thus this is expected to follow suit in the B-to-B context.

Table 2. Relationship between cognitive and relational SC

Relationship	Theory	References
b (cognitive SC \rightarrow relational SC)		
Cognitive SC is an antecedent to relational SC where close relationships are often formed within communities where the presence of shared meanings and norms (cognitive SC) allow for stronger ties (relational SC).	Relationship Marketing theory	Berry (1983) Burke and Reitzes (1991)
Relationship strength (relational SC) is more likely to develop sooner within groups than with outsiders (cognitive SC)	Agency Theory	Ellis and Johnson (1993) Logan (2000)

Table 3 describes the association of structural SC to cognitive SC. This is in line with social exchange theory which implies that the structural and cognitive SC association relies on the premise that social interactions play a critical role both in shaping a common set of organization values and goals (Hinde, 1979). Business Action Theory (BAT) also applies as it builds on communicative action theories and business relationship theories (Goldkuhl, 1995). Here established relationships are created through a continuous interaction and such relationships are sustained through business process interactions.

Table 3. Relationship between structural and cognitive SC

Relationship	Theory	References
c (structural SC \leftrightarrow cognitive SC)		
Structural and cognitive SC association relies on the premise that social interactions play a critical role both in shaping a common set of organization values and goals.	Social Exchange Theory	Hinde (1979)
Established relationships are created through a continuous interaction and such relationships are sustained through business process interactions	Business Action Theory	Goldkuhl (1995)

Table 4 describes the association of all three SC dimensions to loyalty. Here, Van Den Bulte and Wuyts (2007) made reference to social network theory and maintained that trusting relationships (relational SC) not only increases loyalty but are rooted in network density or the level of inter-connectedness amongst network members (structural SC). Network research also shows that these forms of network inter-connectedness positively affect cooperation, knowledge transfer, communication efficiency, and product development performance (Rowley, 1997; Tsai, 2001; Walker, Kogut, and Shan, 1997). More network partners (structural SC) also provide access to and control more valuable information and resources, which supports increased value creation (and loyalty) from network ties (Baum, Calabrese, and Silverman, 2000; Burt, 1992). Hence, an organization occupying a central location in a social interaction network is proposed to more likely have higher loyalty ties to other organizations in the network (Granovetter, 1985).

Table 4. Relationship between structural, cognitive and relational SC to loyalty

Relationship	Theory	References
d (structural SC \leftrightarrow cognitive SC \rightarrow relational SC \rightarrow Loyalty)		
Trusting relationships (relational SC) not only increases loyalty but are rooted network density or the level of interconnectedness amongst network members (structural SC).	Social Network Theory	Van Den Bulte and Wuyts (2007)
Organizations' social interactions (relational SC) influence the formation of a shared vision (cognitive SC) which in turn leads to loyalty.	Organizational socialization	Krackhardt (1990) Lindenberg, (1996)
Structural and relational SC may also stimulate loyalty as previous studies have suggested that loyal relationships evolve from social interactions. This also depicts the link between investment and loyalty.	Investment model of commitment	Rusbult (1980) Gulati (1995) Granovetter (1985)

Krackhardt (1990) also posited that the organizations' social interactions (relational SC) often influence the formation of a shared vision (cognitive SC). Here, the literature on organizational socialization (Lindenberg, 1996) highlighted the importance of informal social interaction in forming loyalty ties. Hence, frequent and close social interactions

permit organizations to know each other, share important information whilst creating common views. For example, the social interaction process has led organisations to realize and adopt languages, codes and practices and may share a collective orientation toward the pursuit of similar goals and plans. Relational and cognitive SC may also enhance loyalty as it encourages the development of trusting relationships whilst erasing the possibility of opportunistic behaviour (Barber, 1983; Ouchi, 1980). In this regard, relational SC entails the strength of the relationship built over time, whereas cognitive SC refers to the commitment to align cultures and goals within the relationship.

Rusbult's (1980) investment model of commitment also depicts the positive link between investment and loyalty - a proxy for relational SC. Structural and relational SC may also stimulate loyalty as loyal relationships evolve from social interactions (Gulati, 1995; Granovetter, 1985). As organizations interact over a period of time, relationship quality become more concrete (Gabarro, 1978) and this enhances cooperative behaviours, which in turn may affect decisions that increases loyalty (Donaldson, 2001). High-quality relationships are also a result of trust, commitment, and reciprocity and entail an efficient cost of maintaining the relationship with a 'minimum of hassles' (De Wulf, Odekerken-Schröder, and Iacobucci, 2001). Moreover, the network literature has documented the implications of strong social interaction for trust and loyalty (Krackhardt, 1992; Sirdeshmukh, Singh, and Sabol., 2002). Thus, in a B-to-B context, relationships that include interpersonal ties can better uncover key information, build strong B-to-B relationships, and influence behaviours beyond the contractual setting (Granovetter, 1992; Bendoly, Croson, Goncalves, and Schultz, 2010).

Overall this model poses the 'how' question for inter-firm alliances and highlights important sets of conditions deriving from the use of SC dimensions (in the context of social networks firms are placed in), which in turn influences their behaviour, and ultimately the 'continuance' or 'cessation' of the partnership. The benefits to the firm of cognitive, relational and structural SC result in loyalty but to what extent is the relation forms core of this research study. Thus, an understanding of the significance of SC's three dimensions that influence alliance formation provides insights for managers on the path-dependent processes that may lock them into certain courses of action, as a result of constraints from their current ties. Such concerns can then be anticipated and thus can be proactively initiated to enhance their informational capabilities. In another instance, a potential advantage can stem from economies of scope and applying relevant resources in different contexts. In a similar light, and in relation to transactional costs, the costs of maintaining the network are

in the management of information (structural SC) and mutual leniency, reinforcing trustworthy behaviour (relational SC) whilst underscoring network commitment (cognitive SC) and having a good grasps of how these interact and influence each other in loyalty building will be useful. For example loyalty can be a cause of both continuance and cessation, which the various dimensions of SC are interrelated, to cause' loyalty.

Effective B-to-B relationships are of core importance and building (and sustaining) long-term relationships serve as a key target for successful business activities. Heskett, Sasser, and Schlesinger (1997) first point to loyalty as the essential element or condition of an effective business strategy. The economic value of loyalty also has been discussed by Jones and Sasser (1995) and Reichheld (1996), where a complete understanding of the concept of loyalty highlights the need for a balance of value between businesses and the need to develop loyalty as a long-term investment. Thus, the benefits to the firm of SC, resident within the relationship, are the generation of loyalty. Besides, a number of loyalty indicators are evident in the services literature and this includes concepts such as 'repurchase intentions' and willingness to pay more (Barry, Dion, and Johnson, 2008; Gil Saura, Frasquet-Deltoro, and Cervera-Taulet, 2009; Mosisescu and Allen, 2010) and in the models' case, 'cessation' and 'continuance'. Furthermore, Palmatier, Dant, Grewal, and Evans (2006) asserts that firm loyalty has proven to be key in determining the health of B-to-B relationships. So how does inter-firm trust lead to greater loyalty? Knowledge-based trust (resulting from mutual awareness) and deterrence-based trust (resulting from reputational concerns) results in contractual safeguards, leading to greater loyalty (Bradach and Eccles, 1989). As a result, contractual concerns are more likely to be alleviated when trust is established and this is due to the social network existence (Gulati, 1998). This is where the various dimensions of SC can be studied. Whenever two firms enter an alliance, whatever its exact institutional structure, their network proximity is posited to influence the specific governance structure used to formalize the alliance (Gulati, 1993). Also, the extent to which two partners are socially embedded can influence their preceding behaviour and affect the alliance future success. Moreover, a firm's portfolio of alliances and its network position can have a profound influence on its overall performance (Gulati, 1998) and as such exploring the development of B-to-B SC can play an important role.

The conceptual framework above provides greater insights into the potential evolution of networks, where strategic action and social structure are closely intertwined. This facilitates greater understanding of the extent to which B-to-B alliances are locked into path-dependent courses of action as it allows firms to also be able to select path-creation

strategies (Garud and Rappa, 1994). As a result, firms can then visualize the desired network structure of alliances in the future and work backwards to define their current alliance strategy. Gulati (1998) also observed that firms which independently initiated new alliances turned to their existing relationships first for potential partners. The manner and extent to which were embedded were likely to influence key decisions, their choice of partner, the type of contracts used, and how the alliance developed and evolved over time. Gulati's (1998) fieldwork concluded that prior ties in social networks influenced the creation of new ties whilst also affecting their design, their evolutionary path, and their ultimate success. A similar orientation also can be applied for studying the consequences of B-to-B SC alliances. Here, firms entering alliances can use social networks as SC becomes a basis for competitive advantage (Burt, 1997). Moreover firms are able to extract superior terms of trade because of possible control benefits as a result of SC. Therefore, the informational benefits from social networks can have implications for the growth and corresponding success of the alliance itself. Eisenhart and Schoonhjoven (1996), in their study, also determined that alliances form when firms are in vulnerable strategic positions either because they are competing in highly competitive industries or because they are attempting pioneering technical strategies. Their findings also conclude that alliances form when firms are in strong social positions such that they are led by large, experienced, and well-connected top management teams.

Overall this conceptual framework forms part of building blocks and allows one to distinguish how the context of the society that is being studied differs from other studies in existing literature. This method is in line with the practice proposed by Inkpen and Tsang (2005). Incorporating social network factors into firms' alliance behaviour also provides a more accurate representation of key indicators which influences strategic actions of firms, and this has implications for managerial practice, which has so far been underexplored.

A PROPOSED RESEARCH AGENDA AND POTENTIAL RESEARCH METHOD

It has been argued that SC is a useful concept to incorporate into IB research into B-to-B relationships (and by extension relationships with consumers). But how could this usefully be done? A way forward is proposed and this consist of specific research questions, case analysis and particular data collection methods and analysis. This discussion will be brief but useful to touch on because of its potential practical implications in the business arena. Because SC and B-to-B relationships are so contextually specific, and because relatively little

is known about the causes and effects at present in IB systems, several research questions appear paramount: "How can businesses entering strategic alliances with other businesses use social capital to manage B-to-B relationships and enhance loyalty?

This is elaborated by the following sub-questions:

- a. What aspects of the SC dimensions play a more critical role in influencing loyalty intentions?
- b. How can the B-to-B relationship be managed to support, plan and assess the activities which influence loyalty intentions?

These questions are highly contextual. As relationships are central to SC, it is argued that case research is best suited to exploring SC in a B-to-B context, both to validate the proposed framework and to properly amend and adjust it. Case research also allows a more thorough investigation of the B-to-B phenomenon in the IB context as concrete nature of case study evidence is more cogent than statistical findings (Dickson, 1982).

A useful methodology to address the research question(s) is by comparative case studies through interpretive analysis, using the proposed model whilst applying phenomenological and explanatory research (i.e., asking 'how' and 'why' types of questions). Two primary methods of gathering data are through company files, archival documents and in-depth interviews with B-to-B managers. Interviews in particular could explore in detail the respondent's own perceptions and accounts on their B-to-B relationship and apply 'convergent interviewing' by gathering insights into respondents' views and attitudes about their B-to-B relationship, and their perceptions about why and how firms build relationships. To further validate the research questions, a quantitative study is recommended with the following propositions to test.

Significance of SC's relational dimension to loyalty.

- The greater the trust between firms the greater the loyalty
- The greater the commitment between firms the greater the loyalty
- The greater the reliability between firms the greater the loyalty
- The greater the long-term commitment between firms the greater the loyalty
- The greater the satisfaction between firms the greater the loyalty

Significance of SC's structural dimension on loyalty.

- The greater the social interaction between firms the greater the loyalty
- The greater the communication intensity between firms the greater the loyalty
- The greater the resource exchange between firms the greater the loyalty
- The greater the network ties between firms the greater the loyalty

Significance of SC's cognitive dimension on loyalty.

- The greater the shared vision between firms the greater the loyalty
- The better the managerial skills between firms the greater the loyalty
- The greater the person-related competencies between firms the greater the loyalty

Comparative case studies as described above, together with company documentary evidence can result in case descriptions useful to forming an understanding of the 'how' and 'why' of SC dimensions and successful B-to-B collaborations. These can provide templates for more generalized data collection and analysis.

CONCLUSIONS AND DIRECTIONS FOR FUTURE RESEARCH

SC derived from B-to-B relationships can impact its bottom line whilst the interactions establish a pattern of expectations based on norms of reciprocity and equity. If these two patterns persist, the sum of resources that accrue to a business transpires and an SC base is built. Thus, an understanding of SC's nature in IB is necessary because it is a key element of a business's competitive advantage.

A synthesis of the literature on B-to-B SC and loyalty into a single, process-based framework has been presented here. The literature suggests that stronger relationships, shared beliefs between partners, and multiplex ties result in higher SC. This approach redefines relationships by expanding on the present understanding of SC dimensions and offers insights into alliance formation in IB. It also provides an understanding of how B-to-B relationships, as understood via the established SC dimensions (i.e., relational, cognitive and structural), underpin networks and alliances that are salient to IB.

By examining the specific way in which social networks (via SC dimensions) influence firms' future actions, firms can begin to take a more pro-active stance in the new ties they enter. This will be in designing networks, outlining implications on future partners and also in obtaining control benefits. Similarly, there are several insights that result from understanding the complexities associated with managing a portfolio of alliances and relational capabilities. Ultimately, managers want to know how to manage B-to-B alliances,

and the recognition of B-to-B SC dimension dynamics that influence the performance of alliances can be extremely beneficial. The challenge for scholars studying networks and alliances is to bridge the gap between theory and practice and translate some of their important insights for managers of the alliances.

The proposed model is also specifically intended to explore the inter-dependence of SC, embedded in B-to-B relationships as a greater understanding of SC dimensions can be valuable conduits of information that provide both opportunities and constraints for firms. It can also have important behavioural and performance implications for their B-to-B alliances, as by channelling information, the management of SC dimensions will enable firms to discover new alliance opportunities and can thus influence how often and with whom those firms enter into alliances.

Hence, empirical testing is required as it has the potential to provide managerially relevant ("actionable") results in 'how' and in 'what way' B-to-B SC can be harnessed in IB. Research along this path also further expands understanding of SC's role in altering existing B-to-B exchange relationships and the manner by which firms use alliances to create and add value. It also adds to the limited literature on B-to-B service relationships in a global context whilst having the potential to provide managerially relevant ("actionable") results in 'how' and in 'what way' B-to-B SC can be harnessed in the 21st century IB system.

There are, of course, limitations to this, as any, model, and a number of issues should be further addressed. One has already been noted in the earlier discussion of strategic alliances, namely the fact that SC can have costs as well as benefits. These are more diffuse and subtle than those under a transactions costs rubric but they must be kept in mind in any future study. Not all relationships are worth having (or continuing) and the SC capital they create may be value-destroying in some cases.

There are also important cross-cultural issues. In China, 'guanxi' plays a pivotal role in building B-to-B relationship. How does this relate to SC? In this particular case the properties of 'guanxi' can be seen as the result of the interplay between resource scarcity and Chinese cultural context, low trust-radius, familyism, and the lack of overarching norms, in effect both a possible cause and an effect of SC and one where business and personal spheres are often highly mixed. Li and Si (2007) proposed a type of network-based SC which account for the dynamics (and its dimensions), comprising of dense strong ties accompanied by sparse weak ties. On the other hand the boundary between business and social lives in Western countries is more unambiguous and thus individuals tend to separate business and social networks. Here, the SC concept and formulation will be somewhat different than in

China and other non-western societies (and, indeed, this paper has implicitly been based in the western paradigm).

REFERENCES

- Adler, P. S. and S. W. Kwon. 2002. Social capital: Prospects for new concept. *Academy of Management Review* 27 (1): 17-40.
- Auster, E. 1994. Macro and strategic perspectives on inter-organizational linkages: A comparative analysis and review with suggestions for reorientation. *Advances in Strategic Management* 10B: 3–40.
- Bansal, H. S., P. G. Irving, and S. F. Taylor. 2004. A three component model of customer commitment to service providers. *Journal of the Academy of Marketing Science* 32 (3): 234-250.
- Barber, B. 1983. The logic and limits of trust. New Brunswick, NJ: Rutgers University Press.
- Barnes, J. G. 1997. Closeness, strength, and satisfaction: examining the nature of relationships between providers of financial services and their retail customers. *Psychology and Marketing* 14 (8): 765-790.
- Barney, J. B. 1991. Firm resources and sustained competitive advantage. *Journal of Management* 17 (1): 99-120.
- Barry, J., P. Dion, and W. Johnson. 2008. A cross-cultural examination of relationship strength in B2B services. *Journal of Services Marketing* 22 (2): 114-135.
- Baum, J. A. C., T. C. Calabrese, and B. S. Silverman. 2000. Don't go it alone: Alliance network composition and startups' performance in Canadian biotechnology. *Strategic Management Journal* 21 (3): 267–94.
- Bendoly, E., R. Croson, P. Goncalves, and K. Schultz. 2010. Bodies of knowledge for research in behavioral operations. *Production and Operations Management* 19 (4): 434–452.
- Berry, L. L. 1983. Relationship marketing. In L. L. Berry, L. Shostack, and G. Upah, editors, *Emerging perspective on services marking*. Chicargo, IL: *American Marketing Association* (25-28).
- Berry, V., A. Parasuraman, and V. Zeithaml. 1996. The behavioural consequences of service quality. *Journal of Marketing* 60 (4): 31-46.
- Bradach, J. L. and R. G. Eccles. 1989. Markets versus hierarchies: From ideal types to plural forms. *Annual Review of Sociology* 15: 97–118.

- Bourdieu, P. 1985. The forms of capital. New York: Greenwood.
- Buckley, P. 2011. International integration and coordination in the global factory. Management International Review 51: 269-283.
- Burke, P. J. and D. C. Reitzes. 1991. An identity theory to commitment. *Social Psychology Quarterly* 54 (3): 239-51.
- Burt, R. S. 1992. *Structural holes: The social structure of competition*. London: Harvard University Press.
- Burt, R. S. 1997. The contingent value of social capital. *Administrative Science Quarterly* 42 (2): 339-365.
- Burt, R. S. 2000. The network structure of social capital. Research in Organisational Behaviour 22: 345-423.
- Chan, J., N. Pun, and M. Seldon. 2013. The politics of global production: Apple, Foxconn and China's new working class New Technology. *Work and Employment* 28 (2): 100–115.
- Cohen, D. and L. Prusak. 2001. *In good company: How social capital makes organizations work.*Boston: Harvard Business School Press.
- Coleman, J. 1990. Foundations of social theory. Cambridge: Harvard University Press.
- Crosby, L., K. Evans, and D. Cowles. 1990. Relational benefits in service industries: The customer's perspective. *Journal of the Academy of Marketing Science* 26 (Spring): 101-114.
- De Wulf, K., G. Odekerken-Schröder, and D. Iacobucci. 2001. Investments in consumer relationships: A cross-country and cross-industry exploration. *Journal of Marketing* 65 (10): 33–50.
- Dickson, P. R. 1982. The impact of enriching case and statistical information on consumer judgements. *Journal of Consumer Research* 8: 398-406.
- Donaldson, L. 2001. The contingency theory of organizations. Thousand Oaks, CA: Sage Publications.
- Dunning, J. 2015. The globalisation of business. New York: Routledge.
- Dwyer, F. R., P. H. Schurr, and S. Oh. 1987. Developing buyer-seller relationships. *Journal of Marketing* 51 (4): 11-27.
- Easton, G. 1992. Industrial networks: A new view of reality. London: Routledge
- Eisenhart, K. and C. B. Schoonhjoven. 1996. Resource-based view of strategic alliance formation: Strategic and social effects in entrepreneurial firms. *Organisation Science* 7: 136-150.

- Eklinder-Frick, J., L. T. Eriksson, and L. Hallen. 2014. Multidimensional social capital as a boost or a bar to innovativeness. *Industrial Marketing Management* 43: 460-472.
- Ellis, S. and L. Johnson. 1993. Observations: Agency theory as a framework for advertising agency compensation decisions. *Journal of Advertising Research* 33 (5): 76–80.
- Fehr, B. 1996. Friendship processes. Thousand Oaks, CA.: Sage Publications
- Gabarro, J. J. 1978. The development of trust, influence, and expectations. In A. G. Athos and J. J. Gabarro, editors, *Interpersonal behaviors: Communication and understanding in relationships*. Englewood Cliffs, NJ: Prentice-Hall (290: 303).
- Garud, R. and M. Rappa. 1994. A socio-cognitive model of technology evolution. *Organization Science* 5 (3): 344–362.
- Gil Saura, I., M. Frasquet-Deltoro, and A. Cervera-Taulet. 2009. The value of B2B relationships. *Industrial Management and Data Systems* 109 (5): 593-609.
- Goldkuhl, G. 1995. Information as action and communication. In B. Dahlbom, editor, *The infological equation*. Essays in honor of Börje Langefors, Gothenburg Studies of in information systems 6, Göteborg University.
- Granovetter, M. S. 1973. The strength of weak ties. *American Journal of Sociology* 78 (6): 1360-1380
- Granovetter, M. S. 1985. Economic action and social structure: The problem of embeddedness. *American Journal of Sociology* 91: 481-510.
- Granovetter, M. S. 1992. *Problems of explanation in economic sociology*. In N. Nohria and R. Eccles editors, *Networks and organizations: Structure, form, and action*: Boston: Harvard Business School Press (25-26).
- Granovetter, M. S. 1995. *The economic sociology of firms and entrepreneurs*. New York: Russell Sage Foundation.
- Gremler, D. D. and K. P. Gwinner. 2000, Customer employee rapport in service relationships. *Journal of Service Research* 3 (1): 82-104.
- Gulati, R. 1993. *The dynamics of alliance formation*. Unpublished doctoral dissertation, Harvard University.
- Gulati, R. 1995. Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. *Academy of Management Journal* 38: 85-112.
- Gulati, R. 1997. Which firms enter into alliances? An empirical assessment of financial and social capital explanations. Working paper, J. L. Kellogg Graduate School of Management, Northwestern University.
- Gulati, R. 1998. Alliances & networks. Strategic Management Journal 19: 293-317.

- Hagedoorn, J. and G. Duysters. 2002. Satisfying strategies in dynamic inter-firm networks— The efficacy of quasi-redundant contacts. *Organisation Studies* 23: 525–666.
- Hall, P. and D. Soskice. 2001. *An introduction to varieties of capitalism*. Oxford: Oxford University Press.
- Heide, J. and A. Miner. 1992. The shadow of the future: Effects of anticipated interaction and frequency of contact on buyer–seller cooperation. *Academy of Management Journal* 35: 265–291.
- Heskett, J., W. E. Sasser, and L. A. Schlesinger. 1997. The service profit change: How leading companies link profit and growth to loyalty, satisfaction and value. New York: Free Press.
- Hinde, R. A. 1979. Towards understanding relationships. New York: Academic Press.
- Inkpen, A. and E. Tsang. 2005. Social capital, networks and knowledge transfer. *Academy of Management Review* 30: 146–165.
- Jones, T. and S. F. Taylor 2012. Service loyalty: accounting for social capital. *Journal of Services Marketing* 26 (1): 60-75.
- Jones, T. O. and E. Sasser. 1995. Why satisfied customers defect. *Harvard Business Review* Nov/Dec: 88-99.
- Kay, N. 1997. Pattern in corporate evolution. Oxford: University Press.
- Knoke, D. and J. H. Kuklinski. 1982. Network analysis. Beverly Hills, CA: Sage.
- Kogut, B. 1989. The stability of joint ventures: Reciprocity and competitive rivalry. *Journal of Industrial Economics* 38: 183–198.
- Kogut, B., W. Shan, and G. Walker. 1992. The make or-cooperate decision in the context of an industry network. In N. Nohria and R. Eccles, editors, *Networks and organizations*. Cambridge: Harvard Business School Press.
- Krackhardt, D. 1990. Assessing the political landscape: Structure, cognition, and power in organizations. *Administrative Science Quarterly* 35: 342-369.
- Krackhardt, D. 1992. The strength of strong ties: The importance of philos in organizations. In N. Nohria and R. G. Eccles, editors, *Networks and organizations: Structure, form, and action.* Boston: Harvard Business School Press (216-239).
- Krause, D., R. Handfield, and B. Tyler. 2006. The relationship between supplier development, commitment, social capital accumulation and performance improvement. *Journal of Operations Management* 2: 528-545.
- Lashinsky, A. 2012. Inside Apple. London: John Murray.
- Levinthal, D. A. and M. Fichman. 1988. Dynamics of inter-organizational attachments: Auditor-client relationships. *Administrative Science Quarterly* 33: 345–369.

- Lin, N. 1999. Building a network theory of social capital. Connections 22 (1): 28-51.
- Li, Y. and S. Si. 2007. Organizational learning approaches and management innovation: An empirical study in Chinese context. *Journal of Current Issues in Finance, Business and Economics* 1 (2/3): 1–10.
- Lindenberg, S. 1996. Constitutionalism versus relationalism: Two views of rational choice sociology. In J. Clark, editor, *James S. Coleman*. London: Falmer Press (299-311).
- Logan, M. 2000. Using agency theory to design successful outsourcing relationships. *The International Journal of Logistics Management* 11 (2): 21–32.
- Matthews, C. 1999. Managing international joint ventures. London and Dove: Kogan Page Limited.
- Medlin, C. J. 2004. Interaction in business relationships: A time perspective. *Industrial Marketing Management* 33: 185-193.
- Moran, P. 2005. Structural vs. relational embeddedness: Social capital and managerial performance. *Strategic Management Journal* 26: 1129-1151.
- Morgan, R. M. and S. D. Hunt. 1994. The commitment–trust theory of relationship marketing. *Journal of Marketing* 58 (7): 20–38.
- Mosisescu, O. and B. Allen. 2010. The relationship between the dimensions of brand loyalty:

 An empirical investigation among Romanian urban consumers. *Management & Marketing* 5 (4): 83-98.
- Nahapiet, J. and S. Ghoshal. 1997. Social capital, intellectual capital and the creation of value in firms. *Academy of Management Proceedings* 11 (3): 35-39.
- Nahapiet, J. and S. Ghoshal. 1998. Social capital, intelectual capital, and the organisational advantage. *Academy of Management Review* 23: 242-266.
- Narula, R. 2006. Globalization, new ecologies, new zoologies, and the purported death of the eclectic paradigm. *Asia Pacific Journal of Management* 23: 143-151.
- North, D. C. 1990. *Institutions, institutional change, and economic performance*. Cambridge: Harvard University Press.
- Oliver, C. 1997. Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal* 18 (9): 679-713.
- Ouchi, I. V. G. 1980. Markets, bureaucracies, and clans. *Administrative Science Quarterly* 25: 129-141.
- Palmatier, R., R. Dant, D. Grewal, and K. Evans. 2006. Factors influencing the effectiveness of relationship marketing: A meta-analysis. *Journal of Marketing* 70: 136-153.

- Parkhe, A. 1993. Strategic alliance structuring: A game theoretic and transaction cost examination of interfirm cooperation. *Academy of Management Journal* 36: 794–829.
- Peng, M. W. 2003. Institutional transitions and strategic choices. *Academy of Management Review* 28 (2): 275-296.
- Podolny, J. M. and T. Stuart. 1995. A role-based ecology of technological change. *American Journal of Sociology* 100: 1224–1260.
- Porter, M. E. 1980. Competitive strategy. New York: Free Press.
- Portes, A. 1988. Social capital: Origins and applications in modern sociology. *Annual Review of Sociology* 24: 1-24.
- Powell, W. W., K. Koput, and L. Smith-Doerr. 1996. Inter-organizational collaboration and the locus of innovation: Networks of learning in biotechnology. *Administrative Science Quarterly* 41: 116–145.
- Putnam, R. 1995. Bowling Alone: America's Declining Social Capital. *Journal of Democracy* 6 (1): 65-78.
- Reichheld, F. F. 1996. Learning from customer defections. *Harvard Business Review* 74 (2): 56-69.
- Rowley, T. J. 1997. Moving beyond dyadic ties: A network theory of stakeholder influences. *Academy of Management Review* 22 (4): 887–910.
- Rusbult, C. E. 1980. Satisfaction and commitment in friendships. Representative Research in Social Psychology 11: 96-105.
- Satariano, A. and P. Burrows. 2011. *Apple's supply-chain secret? Bloomberg Businessweek*, November 3. Available at: http://www.businessweek.com/magazine/apples-supplychain-secret-hoard-lasers-11032011.html.
- Seabright, M. A., D. A. Levinthal, and M. Fichman. 1992. Role of individual attachment in the dissolution of inter-organizational relationships. *Academy of Management Journal* 35 (1): 122–160.
- Siguaw, J. A., P. M. Simpson, and T. L. Baker. 1998. Effects of supplier market orientation on distributor market orientation and the channel relationship: The distributor perspective. *Journal of Marketing* 62 (7): 99–111.
- Sirdeshmukh, D., J. Singh, and B. Sabol. 2002. Consumer trust, value, and loyalty in relational exchanges. *Journal of Marketing* 66 (1): 15-37.
- Smith, V. L. 2006. Markets, institutions and experiments. *Encyclopedia of Cognitive Science*. Hoboken: John Wiley and Sons (1-7).

- Tsai, W. 2001. Knowledge transfer in inter-organizational networks: Effects of network position and absorptive capacity on business unit innovation and performance. *Academy of Management Journal* 44 (5): 996–1001.
- Van Den Bulte, C. and S. Wuyts. 2007. *Social networks and marketing*. Cambridge, MA: Marketing Science Institute.
- Walker, G., B. Kogut, and W. Shan. 1997. Social capital, structural holes, and the formation of an industry network. *Organisational Science* 8 (2): 109-125.
- Williamson, O. E. 2000. The new institutional economics: Taking stock, looking ahead. *Journal of Economic Literature* 38 (3): 595–613.
- Zaheer, A. and S. Zaheer. 1997. Catching the wave: Alertness, responsiveness and market influence in global electronic networks. *Management Science* 43 (11): 1493–1509.