

2 Theoretical foundations

2.1 Theoretical background of the research

The difficulties and disturbances being part of the SC are managed through the creative ability of an organisation. It must be able to implement long-term solutions to risks and react quickly in the process of solving issues (Mitroff and Alpaslan, 2003) to continue with their value offerings in an efficient manner (Ketchen and Hult, 2007). It is highly risky to carry out technological innovation when there are only a few products that prove to be promising ideas and finally reach the market as services or products for the customers (Hagedoorn and Duysters, 2002). A number of studies claim a positive relationship between external STPs and innovation outcome (Ahuja, 2000; Ahuja and Katila, 2001; Baum *et al.*, 2000), demonstrating that organisations actually make use of external knowledge sources to respond to fast technological changes (Hill and Rothaermel, 2003; Keil *et al.*, 2008). Several researchers have suggested that companies are motivated to enter strategic partnerships: (1) to share and reduce risks (e.g. Chang, 2003; Hagedoorn *et al.*, 2006; Forrest and Martin, 1992; Kotabe and Swan, 1995; Døgsen, 1993); (2) for cost-economizing reasons (e.g. Das *et al.*, 1998; Eisenhardt and Schoonhoven, 1996; Hagedoorn, 2002; Kim and Song, 2007; Lorenzoni and Lipparini, 1999); (3) to boost innovativeness (e.g. Lane and Lubatkin, 1998; Noseleit and de Faria, 2013; Park *et al.*, 2004; Phelps, 2010); and (4) to improve performance (e.g. Fey and Birkinshaw, 2005; Hall and Bagchi-Sen, 2002; Huang and Yu, 2011). In the strategic management literature, STPs are frequently postulated as an important enabler of innovativeness in organisations because STP is strongly interrelated to creating value (Cho and Pucik, 2005), reacting to market uncertainty (Stevens and Dimitriadis, 2004), and overcoming demand fluctuations (Fisher, 1997). Golgeci and Ponomarov (2013) showed that the innovativeness of organisations in rapidly changing business environments is also manifested in the way it handles SCRs. It is vital to reflect not merely the innovativeness role in joint performance but also the increased level of susceptibility towards disruptions and

a high degree of adversity (Hult *et al.*, 2004a). Hence, the adverse and disruptive incidents faced by firms can be handled through organisational innovativeness using STP.

In view of unfavourable and uncertain conditions, it becomes essential to understand the capabilities that may enhance the performance of the organisation (Ponomarov and Holcomb, 2009). Any disastrous or disruptive issue subjected to the SC of the organisation can benefit from the building, deployment and leverage of organisational innovativeness (Hearnshaw and Wilson, 2013). For the purpose of the present study, we have decided to use the RBV and the SCT as the two complementary theoretical foundations to perform our research. So far, the RBV has been increasingly used in diverse research disciplines, whereas researchers have only recently begun to adopt the SCT to explain SCM phenomena. Both theories stem from the organisational and management research. One reason for using theories from these adjacent research disciplines is that, in general, organisation and management research is commonly considered as “an applied discipline” (Zald, 1993, p. 514). “The process of systematically applying a theory in diverse settings improves the theory’s explanatory power by delineating its boundaries or scope conditions” (Whetten *et al.*, 2009, p. 3). We consider both theories as convenient to explain the mechanisms inherent in both SCRM and STP. In the following, we will elaborate these two underpinning theoretical lenses informing the present study.

2.2 The Resource-based view of the firm in SCRM and STP

Referring to the RBV, it is the rare, valuable and hard to substitute assets that represent the actual competitive advantage (Zhang and Dhaliwal, 2009). When those resources or assets can provide abnormal profits, they are linked to competitive advantage (Wernerfelt, 1984; Peteraf, 1993). The organisation is viewed as a bundle of resources where the related capabilities, competencies, and assets are configured together (Ketchen and Hult, 2007; Vesalainen and Hakala, 2014). Although the RBV entirely focuses on internal resources of an organisation, there are

certain researchers that have also emphasised the importance of collaboration with regard to unique resource combinations (Rothaermel and Hess, 2007). They give rise to the question of how an interconnected firm can devote to assets that are not completely possessed or controlled by its interior association. Hence, the classical RBV of a firm has several extensions due to the current dissatisfaction with the purely firm–internal resource perspective (Chisholm and Nielsen, 2009). These theoretical extensions make it possible to view suppliers as a part of firms’ valuable resource base (Steinle and Schiele, 2008). Accordingly, the boundaries of firm activities related to the SC and OM have been discussed as part of the resource–based view (e.g. Holcomb and Hitt, 2007). Hence, adopting the RBV perspective, SC linkages that ensure quality materials from suppliers to the organisation or to the customers show valuable resources and provide the organisation with improved operational performance (Rungtusanatham *et al.*, 2003). Both SC linkages and the connection between the SC entities are seen as critical. Similarly, the operational performance impact of the SC interactions can also be clearly understood through the RBV in a pragmatic and conceptual manner (Barratt and Oke, 2007). In this light, R&D co–operation is primarily initiated by firms that are carrying out risky, complex and expensive research projects that are predominantly present in the high–technologies industries (Miotti and Sachwald, 2003).

2.3 The Social Capital Theory in the STP and SCRM context

Gulati and Garguilo (1999) propose that the development of inter-organisational networks (e.g. supply chains) is reliant on endogenous and exogenous variables, as well as on other vital indicators. Moran (2005, p. 1129) advocates that inter-organisational capital “may well prove to be the firm’s most enduring source of competitive advantage.” The external networks of an organisation, according to the SCT, is a strong contributor towards performance (Leenders and Gabbay, 1999). Similar to differences in STPs, SCs vary with respect to critical competencies such as the learning ability (e.g. McFarland *et al.*, 2008), innovation ability (e.g. Faems *et al.*, 2010), or the ability to respond in a quick and speedy manner to the updated conditions of the market (e.g. Merschmann and Thonemann, 2011).

In this regard, risks and costs can be reduced through the long-term SC effectiveness that has been established through mutually beneficial relationships, shared values, and trust (Vasileiou and Morris, 2006). In other words, social capital in the SC context may be viewed as the information, trust, and norms of mutual benefits inherent within SC structures (Woolcock, 1998). Individuals and organisations within social networks have been the focus of research, and the social capital is used to strengthen supplier relationship (Uzzi, 1996), knowledge transfer promotion (Inkpen and Tsang, 2005), and the regional production networks (Romo and Schwartz, 1995).

Nahapiet and Ghoshal (1998) have developed an approach to cluster attributes of social capital in three distinct categories that has been widely adopted in the fields of operations, SCM and strategic management (e.g. Hagedoorn *et al.*, 2006; and Tsang, 2005; Borgatti and Foster, 2003; Koka and Prescott, 2002; Lawson *et al.*, 2008; Mukherjee *et al.*, 2013; Siu and Bao, 2008). They describe attributes of social capital, clustering them into three categories: a) structural, b) cognitive, and c) relational. The structural element refers to the arrangements of linkages between network members. The cognitive element stands for shared understanding and meaning between the members of the networks; and lastly, the relational element involves partnership, trust, reciprocity, and mutual respect derived from long-term interactions (Yli-Renko, 2001). In the following, we will elaborate each dimension since they form the core of our conceptual framework presented later in Chapter VI.

2.3.1 Structural dimension of Social Capital

In total, structural social capital considers the focal points resulting from the arrangement of the system of contacts inside of a given social structure. Partners that upgrade their relations and the communication with different contacts at diverse levels (e.g. technical and managerial) and several functions (e.g. quality, engineering and sales) permit the formation of a social structure that favours both sides of the partnership (Cousins *et al.*, 2006). The structural dimension is a variant of social capital studies in a structuralist and topological manner. At the actor's level,

the central position of the actors in the network and the associated benefits constitute the main focus of these studies (e.g., Burt *et al.*, 2000; Powell *et al.*, 1996; Brass and Burkhardt, 1993). Structural capital is often discussed in terms of the wider network of different actors with which a firm holds ties (Autry and Griffis, 2008; Granovetter, 1973). In order to maximise gain, the actor, in this case, is an active agent who exploits his position and is known to be rational (Prusak and Cohen, 2001). The local network topology is the principal function of the actor that provides benefits and ties that are subliminally perceived of as forming leverageable structures (Athanasiou and Nigh, 1999; Markovsky *et al.*, 1993).

2.3.2 Cognitive dimension of Social Capital

The resources that have the ability to provide shared systems of interpretations, representations, and meanings amongst the parties are referred to as the social capital cognitive dimension (Villena *et al.*, 2011). The joint understanding of fundamental assumptions and concepts, as well as shared language, are the basis for cognitive capital (Bolino *et al.*, 2002). Hence, it provides free communication, as well as resource exchange through common interests and objectives (Parra-Requena *et al.*, 2010). Between two actors, there are high levels of cognitive capital according to research while the definition may vary according to the task, network type and outcomes (Lechner *et al.*, 2010).

2.3.3 Relational dimension of Social Capital

Recurrent bonds with familiar companies generate a pattern of interactions in which focal companies can access data about the quality and performance of existing and potential partners (Zaheer *et al.*, 1998; Gulati *et al.*, 2000). SCT, in general, applies to the analysis of inter-organisational relationships as firms endeavour to share data, synchronise their plans and create products conjointly (Galaskiewicz, 2011). In light of the SCT, we conclude that SCRM is – just like STP – an ongoing process that implicates long-term commitment and dedication of all SC members involved (Mahapatra *et al.*, 2010; Giunipero and Eltantawy, 2004; Manuj and Mentzer, 2008b) and requires mutual trust (Bode *et al.*, 2011; Lavastre

et al., 2012; Faisal *et al.*, 2006; Tang, 2006a). Mutual interdependence (Adler and Kwon, 2002), actors' similarity (Rivera, 2010) and geographic proximity (Chetty and Michailova, 2011; Felzensztein *et al.*, 2010) are the factors behind the development of relational capital between at least two actors. The social quality of the relationships such as mutual identifications, obligations, relational norms, friendship and trust are part of the relational attributes of the social capital structure (e.g. Cousins *et al.*, 2006; Petersen *et al.*, 2008).

2.4 Merging RBV and SCT

The RBV of the firm and the SCT are the two primary theories being part of many studies (cf. Ahuja, 2000a; Zaheer and Bell, 2005). They have the ability to explain a vast spectrum of concepts becoming visible in research trends and to reduce the gap between research paradigms (Di Guardo and Harrigan, 2012). Hence, the RBV and the SCT are the two complementary theoretical bases used in this study to explore the nexus of SCRM and STP. Within strategic management, the resource-based view is considered most dominant (Barney and Mackey, 2005; Newbert, 2007). The strategic management initiative of RBV revolves around performing better than the competitors and achieving a competitive advantage. Thus, the internal resources such as human, organisational, intangible, technological, physical and financial resources are the competitive benefits of an organisation as part of the classical RBV (Fey and Birkinshaw, 2005; Rothaermel and Hess, 2007). Following Rindova and Fombrun (1999, p. 694), the RBV "attributes advantage in an industry to a firm's control over bundles of unique material, human, organisational and locational resources and skills that enable unique value-creating strategies".

The SCT, on the other hand, is considered as the largest growing area of the organisation network research. This concept has been symbiotically able to return the favour and to increase the interest in social networks (Kim *et al.*, 2011). Social capital describes the benefits that actors may gain from their partnership ties and the network in which they are rooted (Baker, 1990; Burt, 1992; Bourdieu, 1986; Coleman, 1988). We adopt the definition of social capital offered by Nahapiet and

Ghoshal (1998) who regard it as “the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit” (p. 243). Relational ties are formed with stakeholders like suppliers, government agencies, unions and competitors as part of the relational resource. The existing variations within the relational resource are considered as a natural outcome of the SC competition (Borgatti and Li, 2009). The proposed extension of the RBV provides a link between the RBV and SCT. We demonstrate the significance of merging the two theories of RBV and SCT while taking into account the inner capabilities of the partners within a network in conjunction with capabilities to exploit the network structure at the same time (Zaheer and Bell, 2005). The theoretical hole between the traditional RBV and SCT is substantial since the RBV centres on the investigation of firms and their internal rent creating assets (member attributes), whereas SCT accentuates the value of external ties (Chisholm and Nielsen, 2009; Lavie, 2006).

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