The impact of trust on strategic resource acquisition through interorganizational networks: Towards a conceptual model

Sigrid De Wever, Rudy Martens and Koen Vandenbempt

ABSTRACT

In this article, we build a conceptual framework that models the influence of social capital as a multidimensional concept on strategic resource acquisition through interorganizational networks. Interorganizational networks are considered as effective when they allow for the acquisition of strategic resources. Our conceptual framework reflects that network effectiveness is dependent on the structural and the relational dimension of social capital. The main focus is on how the relational dimension of social capital – in this article conceptualized as trust – in interorganizational networks can directly and indirectly influence the acquisition of strategic resources through those networks. Based on the network literature, social capital literature and the literature on trust, we seek to develop propositions that detail the relationships among trust, interorganizational network characteristics, strategic resource acquisition/network effectiveness and performance. Basically, we argue 1) that different types of trust will have a different impact on network effectiveness, 2) that the level of trust will influence network effectiveness, and 3) that the interaction between trust and other variables, such as structural dimension variables, are fundamental for analyzing network effectiveness.

Keywords: interorganizational network • social capital • strategic resource acquisition • trust
Introduction and statement of problem

How can firms leverage their interorganizational networks to actually acquire strategic resources? In literature on interorganizational networks, it is argued that firms should look further than their own boundaries in their search for value-generating resources, because networks are a possible means to get access to and subsequently to acquire those strategic resources (Baum et al., 2000; Chung et al., 2000; Rothaermel, 2001; Sarkar et al., 2001; Tsai, 2001; Beckman & Haunschild, 2002; Ireland et al., 2002; Kale et al., 2002). According to the resource-based view of the firm (RBV) the challenge for a firm is to identify and develop strategic resources, because they can result in a competitive advantage (Amit & Schoemaker, 1993). Various kinds of sources of competitive advantage are consequently involved in networks (Thorelli, 1986). We recognize the great potential of interorganizational networks in firms’ search for competitive advantage. In our opinion, however, the key question is ‘how to make use of this potential?’. The network perspective implicitly assumes that resources that are heterogeneous, hard to imitate or to substitute and not easily traded or the so-called strategic resources are automatically transferred and acquired through networks. Is this really the case? Is having an interorganizational network a sufficient condition for strategic resource acquisition? Can strategic resources be acquired through all kinds of interorganizational networks? The network literature does not question which elements are needed to acquire strategic resources from interorganizational network partners. We wonder how firms can leverage their interorganizational networks to actually acquire strategic resources. The question therefore is: which factors can influence strategic resource acquisition through interorganizational networks?

A possible answer to this question can be derived from the social capital perspective. In this article we adopt a social capital approach to look for factors that influence strategic resource acquisition. Out of the literature on social capital it appears that social capital can contribute to a firm’s functioning in several ways. For instance, Nahapiet and Ghoshal (1998) and Tsai and Ghoshal (1998) argue that social capital built within a firm can serve as a facilitator for conditions necessary for the exchange and the combination of resources to occur, namely:

• the access to partners for combining and exchanging resources;
• the anticipation of the value of interaction (will it prove worthwhile?);
  and,
• the motivation to combine and exchange resources.
This implies that social capital reflects mechanisms that can also effect strategic resource acquisition through interorganizational networks. Based on Bourdieu (1986) and on Nahapiet and Ghoshal (1998) we define social capital as ‘the sum of the actual and potential resources embedded within, available through and derived from the network of relationships possessed by a firm and its members’. Moreover, following Putnam (1993), Nahapiet and Ghoshal (1998), Galunic and Moran (2000), Bolino et al. (2002) and Batjargal (2003), we look at social capital as a multidimensional construct that can facilitate action for an organization. In this article we consider the resources embedded in those relationships in terms of two dimensions:

- the **structural** dimension: composed of network ties and the overall configuration of those ties; and
- the **relational** dimension: refers to the trust, trustworthiness, norms and obligations in a network.

This article highlights the use of social capital as a multidimensional concept built in interorganizational networks on strategic resource acquisition through networks. We discuss the structural dimension and the relational dimension of social capital as primary mechanisms by which the strategic resource acquisition through networks is influenced. When networks lead to strategic resource acquisition, we consider them as successful, because these strategic resources can lead to a competitive advantage. The more strategic resources are acquired through the network, the more successful the network is. Therefore, we consider the structural dimension and the relational dimension of social capital as antecedents to the success of networks. In this article the success of networks is reflected by network effectiveness. Consequently, a network is effective if it supplies **strategic or value-generating** resources. This implies that when resources that do not generate value are acquired through networks, these networks are not considered as effective.

Management research on social capital is largely in agreement that social capital is beneficial for the success of networks (see also Jeffries & Reed, 2000). Based on a limited number of discussions about the potential downside of social capital (Portes & Sensenbrenner, 1993; Gulati, 1999; Gargiulo & Benassi, 2000; Batjargal, 2003; Sirmon & Hitt, 2003), however, we question if higher levels of social capital always positively influence the success of networks. Moreover, we doubt the generally accepted link between the structural dimension of social capital and trust. We wonder if trust can exist in the absence of frequent interaction or if trust can be absent in the case of frequent interaction. We contend that more theory is needed before
the importance and effects of social capital on success of networks, more specifically strategic resource acquisition through networks, are more fully understood. The contribution of this article, therefore, is to show that interorganizational network effectiveness depends on 1) the network configuration, 2) the level and type of trust and 3) the interaction between trust and the network configuration.

We develop a conceptual framework in which the main focus is on the relationship between trust, an element of the relational dimension of social capital and interorganizational network effectiveness. In this framework trust is considered as the driver of strategic resource acquisition through interorganizational networks because it has a direct and indirect – by moderating the influence of the structural dimension of social capital on network effectiveness – effect on it. Based on the management literature on networks, social capital and trust, we seek to develop conceptual propositions that detail the relationships among trust, interorganizational network characteristics, strategic resource acquisition/network effectiveness and (ultimately) performance.

To do so, this article is structured along the following lines: we begin with a brief literature review on the structural dimension of the social capital approach. Second, we review the literature on trust and the impact and importance of trust – considered as an element of the relational dimension of social capital – on the effectiveness of interorganizational networks. The aim is to embed our own discussion in a multidimensional social capital perspective on networks that will help us modeling trust in a later stage. The next section advances a conceptual model that details the relationships among the key concepts trust, social capital, interorganizational networks, strategic resource acquisition and performance. In other words, we extend the literature on networks with the concept of trust by embedding it in a multidimensional social capital approach in order to explain interorganizational network effectiveness and ultimately a firm’s performance. The aim is to formulate propositions on the causality among these concepts. Finally, we address limitations of our research and avenues for further research in this area.

The structural dimension of social capital

We look at interorganizational networks as a collection of different network ties characterized by different structural features. Hereby we adopt an interorganizational network perspective instead of an interorganizational relations or dyadic perspective (see Håkansson, 1982, 1987; Honig 


Lampel, 2000). Those ties and structural features are defined as the structural dimension of social capital. In previous studies regarding the implications of the structural dimension two types can be distinguished:

- Studies examining the relationship between the structural dimension of social capital and network formation (for instance, Gulati, 1995; Powell et al., 1996; Gulati, 1999; Ahuja, 2000b).
- Studies examining the link between the structural dimension of social capital and a firm’s performance (Human & Provan, 1997; Hansen, 1999; Ahuja, 2000a; Rothaermel, 2001; Lee et al., 2001; Tsai, 2001).

In the scope of our problem statement, we are interested in research concerning the impact of the structural dimension of social capital on performance. The researchers found that aspects of a firm’s network structure, such as the number of direct and indirect ties, the frequency of interaction, the number of structural holes (the degree to which a firm’s partners are linked to each other), structural equivalence (which refers to similarity of ties) managed by a firm are relevant for a firm’s performance. Not only the kind of ties in a firm’s network but also the structural features of the network, such as density or centrality have a strong impact on the functioning of a firm (Human & Provan, 1997; Nahapiet & Ghoshal, 1998; Hansen, 1999; Tsai, 2001).

A sole focus on the structural dimension (network structure and structural features of the network), however, does not give a comprehensive view of the influence of interorganizational networks on strategic resource acquisition. It emphasizes where (outside a firm) and how (through the ties) a firm can identify and acquire resources. It leaves out, however, other factors that are related to strategic resource acquisition through interorganizational networks or that affect the effectiveness of interorganizational networks. When focusing only on the structural dimension of social capital the assumption is made that network structure and network ties actually provide a firm with value-generating resources in order to affect firm’s functioning. However, a distinction is made between the strategic resources a firm is able to exchange and willing to exchange. The fact that resources can be exchanged through network ties does not mean that firms are ready or willing to exchange them. One of the conditions for exchange of resources to occur is motivation (Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998). If this motivation is missing, firms are unwilling to exchange the available resources. Bouty (2000) argues that the difference stems from the network. Depending on the level and kind of trust built in the network (e.g. expectations concerning rewards or based on previous interaction), the
available/exchangeable resources will vary (based on Ritter, 1999). This implies that when studying the impact of interorganizational networks on strategic resource acquisition or network effectiveness, we do not only have to study the network structure and the structural features of the network, but we also have to consider relational aspects such as trust. This explains why we opted for social capital as a multidimensional concept. In recent literature on trust in organizations, support is found for the argument that only studying the structural dimension is too restricted (see, for instance, Mayer et al., 1995; Wicks et al., 1999; Dyer & Chu, 2000; Jeffries & Reed, 2000). In the next section we look in more detail to the literature on the relational dimension of social capital and how trust can be incorporated in a network analysis.

**Trust as relational dimension of social capital**

Management studies discovered that many economic objectives – from achieving success in mergers, acquisitions and partnerships to sustaining long-term economic growth – are influenced by trust in organizational relationships (see, for instance, Williamson, 1979; Barney & Hansen, 1994; Baba, 1999). Especially in situations involving interdependency and consequently vulnerability the importance of trust is highlighted (Mayer et al., 1995; Baba, 1999; Sherer, 2003). Trust reduces the threat taken by firms when in relationships with others (Jensen, 2000). As interorganizational relationships, for instance, often involve interdependency and consequently vulnerability, the need for trust in interorganizational networks might be relatively high (see also Das & Teng, 2001).

A clear conceptualization of trust is needed before embarking on further research. To keep our analysis manageable, we treat trust as a steady state and avoid feedback issues as discussed by Mayer et al. (1995) and Bouty (2000). Based on Mayer et al. (1995) and Jensen (2000), we define trust as:

> The willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the truster, irrespective of the ability to monitor or control that other party.

When a party makes itself vulnerable in a relationship, it takes a risk. Trust is therefore reflected by the willingness to take a risk in a relationship (Mayer et al., 1995; Jensen, 2000). The existence of risk in a situation determines the need for trust.

Interorganizational networks involve situations of interdependency
and consequently of vulnerability. Especially in interfirm cooperation, networks might involve some risk level due to the possibility of exchanging strategic resources. On the one hand, the firm that owns the needed resources (the source) becomes vulnerable because it gives access to its value-generating resources. Therefore, it risks that other parties in the network might abuse the accessed resources. Moreover, the chance exists that the source is not adequately rewarded or that it gets nothing in return (Szulanski, 1995). On the other hand, the receiver of resources makes itself vulnerable by letting the source learn about its weaknesses and current level of knowledge and skills (Jensen, 2000). In other words, in an interorganizational network it is possible for one firm (the source as well as the receiver of resources) to behave in a way that could harm the other network partners.

Despite this risk, a firm might choose to participate in the interorganizational network because of the existence of trust. Entering an interorganizational network in order to influence performance through the exchange of strategic resources is a risky situation. Without trust, the risk associated with forming an interorganizational network would be perceived as being too high. Therefore trust is needed to create the willingness to transfer and receive resources. In case of networks, we talk of mutual trust, instead of unidirectional (from a given truster to a given trustee) trust (cf. Mayer et al., 1995).

In order to understand the value of trust on strategic resource acquisition, trust should not be treated as a one-dimensional concept (Jeffries & Reed, 2000). Therefore, in order to comprehend the role of trust as relational dimension on network effectiveness, we examine two important dimensions of trust: 1) resiliency and 2) specificity. Based on these two components, we develop a matrix of different types of trust.

The first dimension ‘resiliency’ reflects the extent to which trust is ‘resilient’ rather than ‘fragile’ (Ring, 1996; Leana & Van Buren III, 1999). Fragile trust is based on perceptions of the immediate likelihood of rewards (Leana & Van Buren III, 1999). Fragile trust – also called instrumental or transacting trust – is about being confident that the other party in a dyad will give in return so that rewards are sufficient, even if it concerns a single transaction and thus no opportunity has arisen in the past to establish a basis for trust (Leana & Van Buren III, 1999). Resilient trust is based on stronger and more numerous links between the organizations and its members. This kind of trust is not calculative and its meaning is close to that of benevolence, especially when it is used in the sense of not harming each other (Bouty, 2000).

A second important dimension of trust ‘specificity’ concerns the degree to which trust may exist without much direct information and/or previous interaction, simply by associating. This dimension refers to two different
perspectives on trust: 1) dyadic trust or 2) generalized trust (Leana & Van Buren III, 1999). Unlike dyadic trust, generalized trust relies less on direct knowledge or previous interaction and more on affiliation or reputation. This implies that trust – even resilient trust – can exist without having much personal knowledge of or interaction with the other party (Wicks et al., 1999). In our framework, trust can be built in many different forms in many different types of networks, not only in dense networks. The fact – as explained above – that the frequency of interaction or the directness of information is not necessary because of the existence of generalized trust, offers extra argumentation for our statement. Factors such as affiliation or reputation, that make generalized trust possible, refer to the concept trustworthiness. Consequently, it is not only trust – an attribute of a relationship – that is important but also trustworthiness, an attribute of a unit (Barney & Hansen, 1994; Mayer et al., 1995; Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998; Tsai, 2000).

By combining those two dimensions of trust, we obtain four different types of trust (see Figure 1):

Type 1: Dyadic resilient trust: this type of trust is based on frequent and direct interactions and incorporates a kind of benevolence based on those frequent contacts.

Type 2: Dyadic fragile trust: although this type of trust is based on frequent and direct interactions, these interactions do not cause the feeling of benevolence. This type of trust is a calculative type; there are perceptions of the immediate likelihood of rewards whether it concerns a long-term or short-term relationship.

Type 3: Generalized resilient trust: although this type of trust exists without much previous interaction, the feeling of benevolence is present, simply by associating.

![Figure 1](hum.sagepub.com)  Different types of trust
Type 4: Generalized fragile trust: concerning this type of trust, there are perceptions of immediate return and not feelings of benevolence linked to the cause of the trust: association.

Type 1 and Type 4 reflect expected situations by representatives of a mere structural dimension approach: the more interaction, the bigger the feeling of benevolence and vice versa. Type 2 and Type 3, however, show that the frequency of interaction sometimes is not positively linked to the dimension of resiliency. A low frequency in interaction can be characterized by the feeling of benevolence, implying that some form of trust can also exist in less connected networks.

This typology shows that there exist different types of trust and that not each kind of trust is related to structural features, but to other aspects such as association or feelings. This implies that we believe that trust can also exist between loosely connected organizations (open networks) and consequently we doubt the reasoning behind the conflicting roles based on trust built only in dense networks to outweigh the disadvantages of lacking the benefits of an open network (e.g. informational diversity). Consequently, the structural dimension of social capital – that focuses on frequency of interaction and not on aspects such as association or feelings – does not give a comprehensive view on strategic resource acquisition.

Towards a comprehensive model of trust as a driver of network effectiveness

In our comprehensive model of trust as a driver of network effectiveness we focus on how interorganizational networks influence strategic resource acquisition (Figure 2). Our model encompasses factors about the structural and relational dimension of social capital built in interorganizational networks. Based on this model, we formulate propositions on 1) how interorganizational network ties and their features influence network effectiveness and 2) how trust affects strategic resource exchange. In order to underline the importance of strategic resource acquisition and the potential value of interorganizational networks, we also formulate propositions on how network effectiveness in turn influences a firm’s performance.

Interorganizational networks can ultimately influence a firm’s performance, because interorganizational networks consist of different types of ties – which reflect different network structures – and different structural features. For instance, Ahuja (2000a) discovered that direct ties as well as indirect ties of a firm in its interorganizational network have a positive
impact on a firm’s innovation output. Because direct ties enable knowledge sharing and the bringing together of complementary skills from different firms and because indirect ties can serve as a mechanism for knowledge spillovers, they both can contribute positively and significantly to a firm’s innovation output. Moreover, it appeared that when a firm’s interorganizational network has many structural holes the innovation output is reduced. Human and Provan (1997) explored the impact of network structural differences on outcomes. Their results indicated that the level and range of outcomes obtained by firms in networks can be explained by aspects of network structure. When an interorganizational network is dense and decentralized more different types of outcomes will occur than in the case of an interorganizational network characterized by low density and the presence of a dominant firm. Consequently, 1) the ties and features are channels by which resources are accessed and 2) they are channels by which resources can be exchanged. We argue that network structure and structural features therefore influence how effective an interorganizational network is in accessing, exchanging and helping to acquire strategic resources. More precisely, we state that the number of direct and indirect ties can positively affect interorganizational network effectiveness and that many structural holes can decrease this effectiveness (based on Ahuja, 2000a). We believe that high

Figure 2 Conceptual model: Trust and network effectiveness
density and the absence of dominant network partners – reflected by degree of centrality – has a positive effect on interorganizational network effectiveness. Although network ties on their own can represent significant flows of resources, in our opinion they do not guarantee the actual transfer or exchange of strategic resources in networks. The three biggest barriers to the transfer between network members of strategic resources are (Szulanski, 1995):

- the receiver’s lack of absorptive capacity;
- causal ambiguity; and,
- an arduous (laborious and distant) relationship between source and receiver.

Following Jensen (2000), trust can help to overcome all three of these barriers. Moreover, trust also helps one of the conditions for the exchange of resources to occur, namely motivation (based on Bouty, 2000). Without trust firms will be reluctant or unwilling to share strategic resources because of the risk involved. Thus, other factors, such as trust, help interorganizational network ties and their structural features in actually transferring resources. If trust is missing, they may find the transfer too risky (based on Baba, 1999).

With the presence of trust in a network, organizations are willing to take a risk and are willing to transfer all available strategic resources. More specifically, it is the type of trust (see Figure 1) that will affect the amount of risk firms are willing to take in a relationship (Mayer et al., 1995). In our model, this implies that the type of trust affects how many strategic resources are exchanged. In other words, the type of trust is related to the size of the difference between strategic resources people are willing to transfer and the strategic resources they are able to transfer. Consequently, network effectiveness is dependent on the type of trust. This implies that the amount of strategic resources acquired through interorganizational networks is linked to the type of trust. Based on two dimensions of trust, we distinguished 1) fragile versus resilient trust and 2) dyadic versus generalized trust. Regarding fragile and resilient trust, we state that resilient trust is more positively related to network effectiveness than fragile trust. Because fragile trust is synonymous with calculated trust we expect that less strategic resources are acquired through interorganizational networks than in the case of resilient trust. As discussed, a risk is involved in entering into an interorganizational network. In the scope of strategic resource acquisition this risk is reflected by the possibility of the unwanted or unintended exchange of strategic resources; the so-called leakage-problem (Hamel, 1991; Khanna et al., 1998;
Zeng & Chen, 2003). When the feeling of benevolence is absent and the
calculative behavior is present, the risk related to the leakage problem will
be calculated which will lead to protective behavior. Network members will
be less willing to transfer the available strategic resources. Regarding dyadic
and generalized trust, we argue that dyadic trust is more positively related
to network effectiveness than generalized trust. The difference between
strategic resources people are able to transfer and strategic resources people
are willing to transfer is smaller in the case of direct knowledge of each other
than in the case of indirect knowledge. Lack of personal knowledge decreases
the willingness to transfer strategic resources.

Further, we do not only focus on the positive contribution of trust on
network effectiveness. A number of studies reveal the importance for success-
ful networks of high levels of trust between network partners (based on
Dodgson, 1993; Baba, 1999). However, does a high level of trust always
create the willingness to engage in transfer of strategic resources? Jeffries and
Reed (2000) state that too high trust is as bad as too little. There is also the
concept of optimal trust (Wicks et al., 1999; Parkhe & Miller, 2000) and
Dess and Shaw (2001) indicate that trust is not always beneficial. We argue
that a firm has to avoid high levels of trust because that can lead to the possi-
bility of ignoring opportunities with less trusting partners or to rigidity.
Leonard-Barton (1992) studied the problem of capabilities becoming
rigidities. Based on her ideas it could be argued that trust can hinder strate-
gic resource acquisition through interorganizational networks instead of
enabling it.

Propositions related to interorganizational network effectiveness

The structural dimension of social capital or network ties and structural
features of the network are mediating variables. They account for the
relationship between interorganizational networks (causal variable) and
interorganizational network effectiveness (dependent variable). They reflect
elements that enable firms to benefit from the potential of networks. Thus,
without mediating variables, there is no effect of the causal variable on the
dependent variable except through the causal variable’s impact on the medi-
ating variable, and the mediating variable in turn has an effect on the depen-
dent variable. This means that it is due to the network structure and
structural features that firms can benefit from their networks. Network effec-
tiveness therefore is dependent on the network structure and structural
features of the network. Based on this reasoning, we formulate the follow-
ing propositions:
Proposition 1a: The effectiveness of the interorganizational network is related to the kind of network ties:

- the number of direct ties will be positively associated with interorganizational network effectiveness.
- the number of indirect ties will be positively associated with interorganizational network effectiveness.
- the number of structural holes will be negatively associated with interorganizational network effectiveness.

Proposition 1b: The effectiveness of the interorganizational network is related to the structural features of the interorganizational network:

- the density of the interorganizational network will be positively associated with interorganizational network effectiveness.
- the absence of dominant network partners will be positively associated with interorganizational network effectiveness.

Trust is considered as a factor that directly and indirectly affects the actual transfer and acquisition of strategic resources. If trust is missing, the transfer of strategic resources is too risky. This implies that trust is also an element that enables firms to benefit from the potential of networks. Too much trust can, however, also have negative effects and hinder the transfer of strategic resources between partners in an interorganizational network (based on Wicks et al., 1999; Parkhe & Miller, 2000; Dess & Shaw, 2001). In our model, trust is a mediating as well as a moderating variable. First, trust (or lack of) as a mediating variable influences the strength or direction of the relationship between interorganizational networks (causal variable) and interorganizational network effectiveness (dependent variable). Trust can control the strength of the relationship between interorganizational networks and interorganizational network effectiveness. If the level of trust changes, the strength of the relationship between interorganizational networks and interorganizational network effectiveness will become stronger or weaker. Whether interorganizational networks enable strategic resource acquisition or not depends – as discussed above – on the type and level of trust. Regarding the type of trust, we discussed that resilient and dyadic trust lead to more strategic resource acquisition through networks than respectively fragile and generalized trust. Therefore, based on our developed matrix of trust we can deduct that Type 1 ‘dyadic resilient trust’ is the most positively related to network effectiveness. Type 4 ‘generalized fragile trust’, on the contrary, is the least positively related to network effectiveness.
effectiveness. Type 2 ‘dyadic fragile trust’ and Type 3 ‘generalized resilient trust’ have an equal effect on network effectiveness, which is larger than the effect of Type 4 and smaller than the effect of Type 1. Type 2 ‘dyadic fragile trust’ and Type 3 ‘generalized resilient trust’ are characterized by contrary movements. For instance, in the case of Type 2 the impact of the direct knowledge trust is moderated by the calculating behavior. In the case of Type 3, the impact of the feeling of benevolence is moderated by trust based on indirect knowledge. Concerning the level of trust, on one hand, the relationship between trust and interorganizational network effectiveness is positive but on the other hand, the relationship is negative. Resilient and dyadic trust are types of trust based on the dimension ‘frequency of interaction’. Based on the concepts ‘cost argument’ (Hansen, 1999; Ahuja, 2000a) and ‘carrying capacity’ (Gulati, 1995), we argue that beyond a certain point of frequency of interaction more interaction may become distracting: network members are spending more time developing or maintaining interaction and may not have enough time to acquire strategic resources. The notion of ‘carrying capacity’ implies that there are limits to the interaction a network member can sustain. If this limit is surpassed, the acquisition of strategic resources based on this interaction is hindered. This implies that the cost associated with high levels of resilient and dyadic trust and the surpassing of the carrying capacity are reflected in a lower network effectiveness. Fragile and generalized trust are not linked to frequency of interaction but to respectively feelings of benevolence and association or affiliation. In our opinion, the danger here is that high levels of trust lead to blind trust. In case of blind trust, actions and decisions based on rational factors are absent. Mainly irrational factors might determine actions and decisions in this case. In the scope of strategic resource acquisition this can mean that less attention is paid to the anticipation of the value of the interaction, which is one of the conditions for the exchange of strategic resources. Based on ‘blind trust’ the interaction is always considered to be worthwhile. Consequently, too much time can be spent on 1) interactions that are not worthwhile because of the absence of strategic resources, or 2) acquiring resources that are wrongly believed to have value from less valuable network partners, while less time is available for 1) spending time on interactions that are worthwhile, or 2) acquiring real value-generating strategic resources from more valuable network partners. Consequently, this irrational behavior can negatively influence network effectiveness.

**Proposition 2a:** The effectiveness of the interorganizational network is dependent on the type of trust built in the interorganizational network:
• Type 1 ‘dyadic resilient trust’ is more positively related to inter-organizational network effectiveness than Type 2 ‘dyadic fragile trust’, Type 3 ‘generalized resilient trust’ and Type 4 ‘generalized fragile trust’.

• Type 2 ‘dyadic fragile trust’ and Type 3 ‘generalized resilient trust’ are more positively related to interorganizational network effectiveness than Type 4 ‘generalized fragile trust’.

• Type 2 ‘dyadic fragile trust’ and Type 3 ‘generalized resilient trust’ are equally positively related to interorganizational network effectiveness.

Proposition 2b: The effectiveness of the interorganizational network is dependent on the level of trust built in the interorganizational network:

• there exists a curvilinear relationship between interorganizational network effectiveness and the level of resilient and dyadic trust.

• there exists a curvilinear relationship between interorganizational network effectiveness and the level of fragile and generalized trust.

Trust is also seen as a moderating variable because of the interaction among trust, network structure and structural features in/of interorganizational networks. The relational dimension of social capital interacts with the structural one. As such, trust moderates the extent to which network ties and structural features mediate the influence of interorganizational networks (causal variable) on interorganizational network effectiveness (dependent variable). The degree to which network ties and structural features benefit interorganizational network effectiveness is likely to be contingent on the level and the kind of trust in the network. This means that networks characterized by the same structure and reflecting the same structural features can have a different influence on network effectiveness because their types and level of trust differ. Based on this reasoning and by putting the two above propositions together, we come up with our basic proposition:

Proposition 3: The level and the kind of trust (fragile/resilient and dyadic/generalized) influence the effect of interorganizational network ties and structural features on interorganizational network effectiveness.
The formulated propositions should not be looked at as research hypotheses that will be tested directly, but as ‘building blocks’ in the research. From the formulated propositions various elements can be identified. Propositions 1a and 1b, on the one hand, focus on the structural configuration of interorganizational networks (kind of ties/network structure and structural features). Proposition 2a and 2b, on the other hand, indicate the necessity of a typology of trust. Proposition 3 puts these two elements together in order to highlight interaction effects. In Figure 3 we summarize the identified elements that will be operationalized in further research.

Propositions related to performance

Interorganizational networks create potential access to strategic resources and network linkages are channels through which strategic resources, with the help of trust, can be exchanged (Propositions 1a/1b, Propositions 2a/2b and Proposition 3). If an interorganizational network transfers strategic resources, it is effective. Effective interorganizational networks can affect a firm’s behavior and performance. According to the RBV, strategic resources can lead to different strategies and form the basis for performance differences among firms and competitive advantages (Gulati et al., 2000). However, in order for the externally obtained strategic resources to affect a firm’s performance, we state that the different divisions in the organizations should use (e.g. combine/explore/exploit) the resources.

The use of strategic resources is said to be dependent on 1) the absorptive capacity and 2) the networks within a firm. Absorptive capacity is defined as the stock of prior related resources (see, for instance, Cohen & Levinthal, 1990; Szulanski, 1995). Based on Cohen and Levinthal (1990) the principle of the concept of absorptive capacity is that organizations need prior related knowledge to assimilate and use new knowledge. Prior related

Figure 3  A basic model for assessing interorganizational network effectiveness

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knowledge confers an ability, ‘absorptive capacity’, to recognize the value of new resources, assimilate them and apply them to commercial ends (see also Lane et al., 2001). A firm that lacks absorptive capacity will be less likely to recognize the value of resources and will be less likely to use them to improve its performance. Although our focus is on interorganizational networks, we need to take the intraorganizational networks into consideration to be able to assess the impact of the interorganizational network effectiveness on a firm’s performance. Intraorganizational networks are defined as the collection of relationships between a firm’s divisions or units or within a firm’s divisions or units. These intraorganizational networks can influence the exchange of externally acquired strategic resources between employees active in the firm (e.g. Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998; Tsai, 2000). Therefore, we formulate the next propositions:

Proposition 4a: The more an interorganizational network is effective, the higher the likelihood that a firm’s performance will be improved.

Proposition 4b: The degree of performance improvement is dependent on the intraorganizational network.

Proposition 4c: The degree of performance improvement is dependent on the level of absorptive capacity.

Limitations and further research

This article attempts to model the influence of interorganizational networks on interorganizational network effectiveness and ultimately on a firm’s performance, thereby paying attention to the role of trust. In developing our model, we have noted several limitations. First, we recognize that the influence on performance of interorganizational networks requires sequentially:

- access to strategic resources;
- transfer or exchange of those strategic resources in order to acquire them; and
- the internal use of the exchanged strategic resources.

We covered explicitly the first two requirements. We looked at the structural dimension of interorganizational social capital to create access to strategic resources outside the firm and channels for the transfer of them (see Propositions 1a and 1b). We discussed the role of trust in enabling the actual
transfer of the externally accessed strategic resources (see Propositions 2a and 2b and Proposition 3). Thus, we discussed the influence of two dimensions of interorganizational social capital. The third requirement, the internal use of the externally acquired strategic resources, is partially dealt with in Propositions 4a, 4b and 4c. In further research we will extend our model by incorporating intraorganizational networks, social capital built within intraorganizational networks (e.g. Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998; Tsai, 2000; Bolino et al., 2002) and the concept of absorptive capacity. We will formulate propositions about how intraorganizational networks, the structural and the relational dimension of social capital built within intraorganizational networks and absorptive capacity influence the sharing between employees of externally acquired strategic resources (see, for instance, Cabrera & Cabrera, 2002).

Second, although we adopt a multidimensional social capital approach we do not discuss the cognitive dimension of social capital (Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998). We limit our discussion to the structural and relational dimension of social capital. Further inquiry should cover the influence of shared values and shared vision on the network effectiveness and thus represent the influence of the three dimensions of social capital. Studying the three dimensions of social capital also implies that the interaction effects between those three dimensions should be examined.

Finally, there is need for additional theorizing in terms of trust based on literature beyond management (e.g. articles from Dasgupta, 1988; Lewicki & Bunker, 1996). There is also need for studying trust as a dynamic concept. Mayer et al. (1995) propose that the outcome of trust (beneficial or not) will influence trust in a relationship. Bouty (2000) looks at the consequences of reciprocation refusal and non-collaboration or exchanging fake resources. She wonders how rapidly and deeply the exchange of resources and trust suffer from such a negative feedback. Therefore, in future research trust should not be treated as a steady state, but attention should be given to the dynamic evolution of trust in interorganizational networks.

References


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**Sigrid De Wever** (BA, BSc, PhD) is Assistant Professor in the Department of Strategy and Business Environment at the RSM Erasmus University, The Netherlands. Her research interests include interorganizational and intraorganizational networks, cooperation versus competition (‘coopetition’), social capital, learning and capability development. [E-mail: swever@rsm.nl]

**Rudy Martens** (PhD) is Professor of Strategic Management in the Faculty of Applied Economics of the University of Antwerp, Belgium. He is chairman of the Department of Management. His research focuses on competence-based management, strategies for small and medium-sized companies, strategic decision-making processes and knowledge management. [E-mail: rudy.martens@ua.ac.be]

**Koen Vandenbempt** (BSc, MA, PhD) is Senior Lecturer of Strategy and Management at the Department of Management (University of Antwerp) and at the University of Antwerp Management School (UAMS), Belgium. His research activities focus on innovation and business strategy in business-to-business markets and on the interrelationship between cognition and strategic action. He also lectures and consults on industrial marketing and strategy issues for industrial companies. [E-mail: koen.vandenbempt@ua.ac.be]