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Original Citation

Thornton, Sabrina, Henneberg, Stephan C. and Naudé, Peter (2013) Understanding types of organizational networking behaviors in the UK manufacturing sector. *Industrial Marketing Management*, 42 (7). pp. 1154-1166. ISSN 00198501

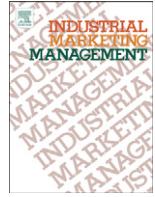
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Understanding types of organizational networking behaviors in the UK manufacturing sector ☆☆☆



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ARTICLE INFO

Article history:

Received 1 December 2012

Received in revised form 1 June 2013

Accepted 1 June 2013

Available online 30 July 2013

Keywords:

Organizational networking
Industrial network approach
Network management
Strong and weak tie
Abductive approach

ABSTRACT

This research is aimed at understanding firms' different types of 'networking behaviors', i.e., how and why firms affect their strategic network position by activities/routines/practices aimed not just at their business partners, but beyond such direct relationships. Thus, we adopt a network perspective to examine how firms exploit their webs of direct and indirect business relationships in order to assess and embrace the potential opportunities and constraints in the network. Based on the industrial network approach (INA), this exploratory research specifically focuses on networking behaviors in the UK manufacturing sector. Thirty-one semi-structured interviews with executive managers from fifteen firms were conducted. We identify four types of organizational networking behaviors by the way in which firms utilize their web of relationships to achieve certain goals. By using the concept of networking behaviors based on the INA as well as the strong-and-weak-tie argument in economic sociology, purposeful networking behaviors can be categorized into the following: *information acquisition*, *opportunity enabling*, *strong-tie resource mobilization* and *weak-tie resource mobilization*. These four 'types' of organizational networking behaviors provide a deeper understanding of how firms operating in business-to-business exchanges relate to and exploit their webs of direct and indirect relationships, taking into consideration the embeddedness and interconnectedness of the network context.

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1. Introduction

Networks of inter-organizational exchanges represent a specific form of markets, made up of direct as well as indirect business relationships (Achrol, 1997; Miles & Snow, 1992; Möller, Rajala, & Svahn, 2005). Understanding systemic structures such as networks, as well as the embeddedness of firms within these structures, has been regarded as a specific research orientation (Achrol, 1997; Thorelli, 1986). With it came a gradual shift in focus in the business marketing and the inter-organizational strategy literature from a monadic perspective, to dyadic business relationships, and finally to business networks (Achrol, 1997; Morgan & Hunt, 1994). In this context the importance of *direct business relationships* for a firm's success has been well established (Morgan &

Hunt, 1994; Palmatier, Dant, & Grewal, 2007). In addition, a focus on such direct business relationships has helped to understand the essence of business exchanges and interactions that take place in a relationship between two organizational actors (e.g., Anderson & Narus, 1990; Barnes, Naudé, & Michell, 2007; Hallén, Johanson, & Seyed-Mohamed, 1991).

However, direct business relationships do not exist in isolation (Anderson, Håkansson, & Johanson, 1994; Granovetter, 1985; Ritter, 2000). Instead, they are interconnected and aggregated as business networks, in which firms and numerous other actors are embedded. This means that while companies have a portfolio of direct relationships, within the network context many *indirect business relationships* exist, i.e., second-order connections where the relationship is mediated by one or several other actors. Therefore, a crucial question arises as to how firms can efficiently and effectively *manage in such complex networks* with regard to mobilizing not just their direct business relationships, but also to exploit the potential inherent in indirect business relationships (Ford, Gadde, Håkansson, & Snehota, 2003; Möller & Halinen, 1999; Mouzas & Naudé, 2007). In this context it has been suggested that a firm's ability to utilize and capitalize on the wider business network (i.e., not just its direct business relationship portfolio) can become a source of competitive advantage, because possessing the ability to cope with, as well as shape and exploit the complexity of the business networks, represents a

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☆☆ This work was supported by the Economic and Social Research Council [grant number ES/I903445/1].

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capability that is difficult for competitors to imitate (Barney, 1991; Gulati, Nohria, & Zaheer, 2000).

Despite this significance of indirect business relationships, current research into how firms interact with their networked environment remains relatively unexplored compared to research on direct business relationships (Äyväri & Möller, 2008; Dyer & Hatch, 2006). Studies in economic sociology (e.g., Thorelli, 1986; Uzzi, 1996; Uzzi & Gillespie, 2002) show some of the key mechanisms that foster the efficiency and effectiveness of knowledge sharing and resource mobilization in the network. However, being embedded in a web of business relationships as part of a network can be a constraint at the same time (e.g., Burt, 2000; Granovetter, 1985, 2005; Rivera, Soderstrom, & Uzzi, 2010; Uzzi, 1996, 1997). In this context a single firm cannot control its network; nevertheless, it can manage within its web of direct and indirect relationships, given the constraints of the network (Håkansson & Ford, 2002). From a focal firm's point of view, how and why companies strategically interact with various direct and indirect counterparts to realize the opportunities and safeguard against the constraints afforded by the network is still unexplored. Therefore, there exists the need to provide an understanding of organizational behaviors aimed at utilizing the multitude of direct as well as indirect business relationships. These behaviors will be subsumed under the construct of *networking behaviors*. We thus borrow this construct from the theory of managing in business networks (Ford et al., 2003; Håkansson et al., 2009), where it represents the notion that a firm's behaviors are aimed at changing its network position.

Our perspective of networking, based on an interaction approach related to the Industrial Network Approach (INA) pertains to *organizational behaviors*. This study, based on the INA, assumes that some firms can leverage their network context better than others by strategically mobilizing and thereby utilizing the web of direct and indirect relationships that they are embedded within. These networking behaviors enable firms to go beyond managing 'intentional nets', i.e., a firm's web of direct business relationships (Möller et al., 2005), and specifically focus on mobilizing multiple direct and/or indirect relationships within the wider network, thereby taking into account the interconnectedness and embeddedness of a firm's network context (see Håkansson, 1982; Håkansson & Ford, 2002; Håkansson & Snehota, 1989; Turnbull, Ford, & Cunningham, 1996). Thus, these behaviors are not about how well firms can manage business relationships, but how firms *manage and strategize* in their network context to embrace the inherent opportunities and hindrances. We thus define the nature of networking behaviors by drawing on Day's (1994) categorization of organizational capabilities, which distinguishes 'inside-out capabilities' (qualification practices) and 'outside-in capabilities' (strategizing practices). As networking behaviors are 'outside-in capabilities', they are aimed at utilizing different types of business relationships strategically based on a focal firm's network position. Such behaviors relate to *activities/routines/practices*,³ which enable firms to make sense of and capitalize on their networks of direct and indirect relationships. Based on this definition, this study aims to answer the following research question: what different types of networking behaviors by a focal firm can be observed in business networks?

This article is organized as follows: First, we carry out a literature review on *network management, organizational networking and strategizing in networks*. Secondly, the research design will be introduced, and the research results will be presented. Finally, this article will conclude with a discussion of the research findings, the implications for existing literature and managerial practice, as well as outline limitations of this study and future research directions.

2. Network management

Network management is a research area derived from the need to go beyond dyadic customer or supplier relationship management, given that firms operate in a complex networked environment in which various counterparts are embedded (Ritter, 1999). There exist several concepts aimed at capturing firms' network management, which are summarized in Table 1.

Network competence is defined as "the degree of network management task execution and the degree of network management qualification possessed by the people handling a company's relationships" (Ritter, 1999, p.471). The concept was developed to capture the competence that 'networking companies' hold. It is the internal organizational ability that qualifies a firm to deal with its network of direct relationships and that enables a firm to carry out relationship-specific tasks. *Network capabilities*, on the other hand, are the "abilities to initiate, maintain and utilize relationships with various external partners" (Walter et al., 2006, p. 546). Note that the former concept takes a competence-based approach, whereas the latter has an emphasis on a dynamic capabilities perspective. Network competence is treated as organizational qualification practices, while network capabilities are seen as an organizational characteristic. Nevertheless, they share some similarities in that they relate to the management of the web of a firm's direct relationships with various counterparts, which relates to 'inside-out' organizational capabilities (Day, 1994). The main contribution of these two studies is therefore in adding another layer of understanding on top of dyadic relationship management and identifying the way in which firms can manage multiple relationships more efficiently.

Networking capability, a concept developed by Mort and Weerawardena (2006), encapsulates how small entrepreneurial firms develop some sort of routines within their networks to configure and reconfigure resources through the networks they build during the process of internationalization. The authors suggest that such capabilities have to be developed and nurtured by the owners of the firms. A recent study by Mitrega et al. (2012) also uses the same term, *networking capability* to denote the organizational capabilities of initiating, developing and terminating business relationships, which is conceptually similar to network capabilities by Walter et al. (2006), except that the former incorporates relationship termination in the conceptualization in order to capture the full life cycle of relationships.

Based on the review of the above network management studies, this growing stream of research has adopted a competence- or capability-based perspective to understand how firms internally 'gear up' as part of a portfolio approach for efficiently initiating, developing and terminating business relationships, through which firms can benefit from combining and configuring resources from various counterparts. While the relationship and network management literature provides ample evidence showing the need for firms to engage in business relationships with various counterparts in order to compete successfully in the market place, these results must be qualified when a network perspective is adopted. In this context, resources and information can flow from one point to another and across the whole network of connected organizations, through webs of connections comprised of direct and indirect relationships. When firms develop relationships with their counterparts, not only do they form connections within these relationships, but also further relationships that are indirectly connected with them; thus, relational outcomes can result from interactions across various partners, even those without direct contact (Anderson et al., 1994). Relationships can therefore be argued to be useful not only to mobilize resources in direct relationships, but also in indirectly connected ones (Gargiulo, 1993; Wuyts, Dutta, & Stremersch, 2004).

3. Organizational networking

Organizational networking is an emerging research area that deserves more attention from business marketing researchers (Ford &

³ We use activities, routines and practices interchangeably, depending on how a specific networking behavior is used by the firm; they are complementary in our conceptualization.

Table 1
Different perspectives of network management.

| Construct | Definition | Dimension(s) | Theoretical perspective(s) | Unit of analysis |
|--|---|--|---|------------------|
| Network competence (Ritter, 1999; Ritter & Gemünden, 2003) | The degree of network management task execution and the degree of network management qualification possessed by the people handling a company's relationships. | <ul style="list-style-type: none"> • Task execution <ol style="list-style-type: none"> 1. Relationship specific 2. Cross relational • Qualification <ol style="list-style-type: none"> 1. Specialist 2. Social | Industrial network approach & Competence-based view | Firm |
| Network capabilities (Walter, Auer, & Ritter, 2006) | The abilities to initiate, maintain, and utilize relationships with various external partners. | <ul style="list-style-type: none"> • Coordination • Relational skills • Partner knowledge • Internal communication Adopted from (Kale, Dyer, & Singh, 2002) | Dynamic capabilities | Firm |
| Networking capability (Mort & Weerawardena, 2006) | The capacity of the firm to develop a purposeful set of routines within its networks, resulting in the generation of new resource configurations and the firm's capacity to integrate, reconfigure, gain and release resource combinations. | <ul style="list-style-type: none"> • Resource configuration <ol style="list-style-type: none"> 1. Build 2. Reconfigure 3. Add 4. Delete | Dynamic capabilities | Firm |
| Networking capability (Mitrega, Forkmann, Ramos, & Henneberg, 2012) | The set of activities and organizational routines, which are implemented at the organizational level of the focal company to initiate, develop, and terminate business relationships for the benefit of the company. | <ul style="list-style-type: none"> • Relationship initiation capability • Relationship development capability • Relationship termination capability | Dynamic capabilities | Firm |

Mouzas, 2013). Not only is a systematic conceptualization and typology lacking in the literature, but empirical evidence regarding the effects of a firm's networking behaviors on its performance is limited. While research into network management from a capability or competence perspective has provided some results in conceptualizing and operationalizing the construct of network management, there is scant effort in conceptualizing organizational networking from a strategizing or behavioral perspective. The concept of networking behaviors has been mostly applied in the context of small entrepreneurial firms at the individual level (owner or manager) and particularly linked to the process and success of internationalization (e.g., Chetty & Campbell-Hunt, 2003; Ferris et al., 2007; Jaklic, 1998; Semrau & Sigmund, 2010). Although these studies explicitly discuss the concept of networking, it has not been conceptualized in a systematic way to capture organizational behaviors in response to the characteristics of networks, i.e., connectedness and embeddedness.

According to Ebers (1997, p. 4), organizational networking can be seen as “a particular form of organizing, or governing, exchange relationships among organizations”, while Håkansson et al. (2009, p. 193) define networking as “the efforts of individual managers to influence the content and direction of the interaction between them”, and further argue that these efforts are “conscious attempts to affect interaction” (p. 197). They are, however, reluctant to link networking to specific outcomes. Although we agree with Håkansson et al. (2009) that networking is conscious, it should also follow that networking serves certain purposes, and firms network to achieve certain goals they envisage *before* they take the actions. Therefore, networking is strategic and purpose-led organizational behavior that firms employ in order to understand, embrace and mobilize their networked environment (Mouzas & Naudé, 2007).

In terms of the patterns or types of networking behaviors, Smith and Laage-Hellman (1992) provide some insights into how triadic connections between companies can be typified. They propose seven patterns of connections in a triad setting based on a case study of an engineering consumables supplier. The patterns of connections among firms are driven by two causes: changes in activities due to the dynamics in structural dependencies among actors and “actor's subjective will or networking” (p. 51). Thus, similarities exist with our conceptualization of organizational networking behavior as being actor-centered. In this context, the motive for networking behavior is based on actors' assessment of the

perceived network dynamics and their anticipation of positive or negative outcomes of such networking behavior (Anderson et al., 1994). Actors are proactive but also reactive to changes, and attempt to influence other members in the network, which can be seen as the ability to ‘strategize’ in the network (Holmen & Pedersen, 2003).

Based on this review of network management and networking approaches in the literature, the conceptualization of organizational networking behavior in our study differs from the existing concepts in three ways. First, organizational networking behaviors are neither characteristics nor qualifications of a firm, and are thus different from those network management studies taking a capability perspective. Secondly, networking behaviors are actions towards direct as well as indirect counterparts (including the combination of the two) at a collective organizational level. These behaviors are derived from the goals (purposes) of the focal organizations, and thus result in purposeful actions that are planned and accordingly enacted. Thirdly, networking behaviors are not merely about mobilizing and reconfiguring resources. Instead, they are potentially aimed at utilizing different types of relationships based on the focal company's network position to serve various organizational purposes.

4. Strategizing in networks

Before we discuss the strategic implications of organizational networking, drawing from research in economic sociology, it is imperative to make clear that the essence of ‘networking’ in this tradition is in line with that in the INA. The school of economic sociology derives from the wider theoretical framework of social exchange theory (see Cropanzano & Mitchell, 2005; Emerson, 1976) and the realization that the neoclassical theory (e.g., transaction cost economics) has many limitations when it comes to explain how individuals or firms, which are embedded in interconnected relationships, perform (Uzzi, 1996). Although the concept of a social network originates from the context of interpersonal social relationships, its applicability has spanned across both business-to-consumer as well as business-to-business marketing, and it has been used to explain the phenomena provoked by network embeddedness of actors (Van Den Bulte & Wuyts, 2007). The pivotal thesis in economic sociology, i.e., the strong-and-weak-tie argument, is therefore suited to our discussion here. Such ties have been empirically

researched in the context of business market settings, and the concept of networking provides strategic insight into the utility of these two different ties in relation to organizational economic behaviors and outcomes (e.g., Rowley, Behrens, & Krackhardt, 2000; Uzzi, 1996; Uzzi & Gillespie, 2002; Wuyts et al., 2004).

Scholars in economic sociology strongly believe that the way in which firms utilize their web of 'strong and weak ties' (i.e., established as well as arm's-length relationships) determines their performance (e.g., Granovetter, 1973, 2005; Uzzi, 1996). This established stream of research looks at how the web of relationships that a person or a firm has impacts on specific outcomes. It has been argued that both strong- and weak-tie relationships have their advantages, and that they serve different purposes for a focal firm. Uzzi (1996) argues that strong-tie relationships (called embedded ties in his study), i.e., relationships characterized by high levels of trust, information sharing and problem-solving coordination, enable a firm to gain access to desired information and opportunities provided within the network. It can be inferred that when a firm has strong relationship management skills, it raises the possibility of strengthening the ability to capitalize on its network through strong ties. Granovetter (1973), on the other hand, contends that the structure of the organizational or personal network is the key for accessing novel information and opportunities (also see Granovetter, 2005). He argues that weak-tie relationships (which can be newly formed or indirect ones) serve as bridges for a focal firm to link with other indirect actors, which might subsequently result in accessing novel information and opportunities that cannot be gained via other strong-tie relationships. This argument is partially shared by Burt's (2000) notion of structural holes, where a weak-tie relationship can potentially work in a focal firm's favor by providing a connection with the wider context. The strong-and-weak-tie argument has shed some light on firm performance from a structural network perspective, but the challenge for individual firms remains somewhat unexplored, i.e., how to exploit these two different types of relationships through specific types of behavioral patterns.

On the other hand, the aforementioned network management literature suggests that direct interaction partners, which are comparable to the notion of strong ties, serve to act as *conduits* for a focal firm to mobilize resources and reach opportunities embedded in the wider network, but they also *buffer* a focal firm from threats or *cushion* the impact of fast-changing dynamics in a volatile environment. Ritter and Gemünden (2003) argue that the management of the web of connected relationships can bring about synergies and increase economic outcomes (e.g., innovation success). As each firm's position in the network is unique from any other network member, any possible synergies are idiosyncratic or unique to a focal firm. This uniqueness in position gives rise to some opportunities and threats afforded by the network, and thus provides strategic implications from a firm's perspective (Johanson & Vahlne, 2011).

However, opportunities are not freely available to firms embedded in the network. Jack (2005) argues that only when firms interact closely with directly connected counterparts, are they able to embrace these opportunities, which reside in indirect relationships. This provides us with a foundation to posit that it requires strategic 'networking', i.e., specific managerial networking behaviors, to access and capitalize on the resources that exist beyond the direct reach of a focal firm (Jack, 2005; Uzzi, 1996). Thus, networking behaviors need to be understood in conjunction with the way in which firms manage their direct relationships with customers and suppliers (as well as with other important organizations, e.g., trade associations) because they are the basis for exchanging resources and information. In summary, firms 'network' to get access to proprietary information, mobilize resources among relationships, reach new opportunities, and maneuver themselves into a desired network position. Therefore, firms need a web of relationships to provide them with the access to the desired information and resources, and to manage in this web they employ certain networking behaviors vis-à-vis direct and indirect relationship partners.

Therefore, the ability to change the network position of a firm in its favor is crucially important as it determines the kinds of resources and information that could be accessible to a focal firm through utilizing these relationships by means of interactions. Zaheer and Bell (2005) argue that 'network-enabled capabilities' (i.e., the combination of a superior set of internal resources and a beneficial network structure of a focal firm) are crucial causes of superior performance. Although the concept of internal resources in their study is not directly linked to networking behaviors, it provides some pointers to the beneficial effects of firms' behaviors towards the networks. It also implies that advantages related to a superior network position alone do not warrant a superior performance without the capability of the focal firm to access and mobilize the desired resources resulting from this network position through interacting with manifold business partners and other influential parties.

5. Research design

The main objective of this study is to delineate the scope and conceptualize the content and distinct types of organizational networking behaviors, which is done using a qualitative and exploratory empirical research design. This study uses a semi-structured interview method based on multiple respondents from a variety of focal firms.

5.1. Research context and sample

The manufacturing sector in the UK was chosen as the research setting for this study. Given the strong challenge from emerging countries with lower-cost labor offerings, the manufacturing sector in the UK has shrunk dramatically (Department for Business, Innovation, & Skills, 2010). As these emerging countries are moving up the value chain by enhancing their technological capacity, manufacturers in the UK have to differentiate their offerings in order to survive, as do the manufacturers in other developed countries. Therefore, manufacturers in the UK need to constantly seek opportunities to innovate and expand (or try to maintain the same level of) their business scale by utilizing their web of relationships and the accompanied resources.

Manufacturing firms in the UK across different sectors are included to form a sampling frame. The Fame Database (UK financial company information and business intelligence) provided the sample population, which was further filtered to include only companies with more than 25 employees. We randomly selected a spread of manufacturing firms within different sectors, thereby cutting across different levels of technological and competitive intensity. A total of 76 potential participating companies were identified and sent a research participation invitation by email, which detailed the purpose of the study and assured potential respondents about confidentiality. A reminder was sent to those who had not replied to the invitation after two weeks. An agreed date for face-to-face interviews was scheduled with each respondent who confirmed his/her participation. Before each interview the participant was contacted via e-mail with a briefing letter detailing the procedure of the interview. The number of participating companies was not a pre-set goal. The sample size was determined by our judgment regarding whether we had reached a 'point of saturation', i.e., a situation when only very few novel insights emerged from each new interview (Kvale, 2007, p. 44). This led to 15 companies participating in this study; using a multi-respondent approach resulted in a total of 31 respondent managers (see Appendix A for the profile of the interviewees).

5.2. Data collection

Organizational networking behavior is the means to efficiently and effectively sense and capitalize on a firm's network context by exploiting the web of direct and indirect relationships. Therefore, the respondents have to be specifically chosen to ensure that they have an overall vision of organizational strategy decisions about interacting with important

counterparts in the network. At least two respondents from each participating company were interviewed in order to get a multi-layered perspective enabling comparison and cross-validation. However, in one instance one interviewee provided a 'saturated' view of his company's networking behaviors, and therefore no further interview was required for that particular organization. In cases where a firm is part of an amalgamation of companies, we decided to recruit more than two respondents as they have working relationships with both 'internal' (sister companies) and 'external' partners (companies outside of the group). We focused on executive managers, e.g., CEOs, general managers, managing directors, marketing directors, sales directors and supply chain directors.

The duration of the interviews ranged from 45 to 90 minutes, with most of them lasting for around one hour. The interviews were carried out with the aid of an interview guide (Kvale, 1983). The interview questions (including probing questions) were developed based on the initial theoretical considerations regarding networking behaviors (Kvale, 2007). However, the interview guide evolved as the empirical study progressed and was modified accordingly following the outcome of each interview to ensure the appropriateness to the topic, thereby increasing the internal validity of the interview (King, 2004). During the process of our data collection the nature, the wording and the order of the questions were adjusted to suit the specific respondent. Interviews were tape recorded and then transcribed verbatim for subsequent data analysis.

5.3. Data analysis

Content analysis is used to analyze the data. Coding is a key feature in content analysis, which was first introduced in grounded theory development, a research design for qualitative analysis developed by Glaser and Strauss (1967). In content analysis, the researcher can give words, sentences and paragraphs meaning, and then codes the meaningful text into various themes, which can be quantified as to how frequently specific themes appear in a text, and in what context (Kvale, 2007). The themes can be decided upon before analyzing the data or emerging themes can be created ad hoc. As this study relates to an under-developed research area and is exploratory, ad hoc theme categorizations are used, which have the advantage of being flexible in existing developed concepts from the literature with the emerging concepts from the empirical work in an hermeneutical circle (Krippendorff, 2012).

NVivo (version 8) is used as an aid for coding large amount of text into themes in a systematic manner. It allows the researcher to code the data (e.g., text and images) into themes, which might be in a hierarchical form. It also makes quantifying qualitative data easier, e.g., via the function of counting the frequency of certain words or codes, and it provides a cross-comparison of the attributes of the cases. For instance, a researcher can easily ascertain whether the themes that appear are different for companies of different sizes.

Our content analysis is informed by Dubois and Gadde's (2002) 'systematic combining' approach using the logic of abductive research to analyze the data from the 31 interviews. We rely on both the literature and the empirical study to guide us through the process of coding themes and grouping them. As coding is an iterative process of going backward and forward between the literature and empirical data, the three researchers discussed the content of these themes regularly throughout the process of data coding. The aim was to form an agreement among them regarding how the themes are defined, separated from one another, and also delineated from other existing concepts in the relationship and network management literature. Initially, one of the three researchers looked for *activities/routines/practices, which enable firms to make sense of and capitalize on their networks of direct and indirect relationships*. In the initial stage of the coding, we purely extracted the themes related to any activities, routines or practices, which are interactive in nature. We focused particularly on the three aspects, information, resources and opportunities, as identified in the literature (Granovetter, 2005; Uzzi, 1996). As we proceeded with the

coding, we observed that resource mobilization can be achieved through two different approaches: interacting with counterparts that are in established relationships with a focal firm as well as with counterparts that are in arm's-length (less established) or indirect relationships, thereby echoing the notion of strong and weak ties in economic sociology. At the same time, Smith and Laage-Hellman's (1992) seven transformation patterns in triads helped us to eliminate unnecessary themes and allowed identified themes to be more systematically organized. Thus, during the process of coding the data, we observed emerging patterns in certain themes that were already identified in the literature. We then arrived at the point where all researchers involved agreed on the identified themes, and the identified themes were categorized into distinct types of organizational networking behaviors.

6. Research results

The themes identified provide four sets (types) of networking behaviors that firms employ to fulfill different goals. They are *information acquisition, opportunity enabling, strong-tie resource mobilization and weak-tie resource mobilization*. Table 2 shows the detailed sub-types, corresponding to the four types of networking behaviors, and the descriptions of the sub-types. The sub-types are the results of the themes we identified through data coding after merging and separation. These sub-types were then categorized into the resulting four types by a focal firm's underlying goals.

These four types of networking behaviors complement networking activities suggested by Ford et al. (2003), which help firms cope with different network paradoxes that constrain as well as enable the interactions with their business counterparts. While their framework emphasizes aspects of managing interactions in relationships, it does not provide an understanding of different means of networking that help firms achieve their networking goals. On the other hand, our respondents stress the importance of differentiating between different anticipated outcomes underlying the focal firm's motivation for their networking behaviors as part of conscious and purposeful managerial decisions, and the resulting strategic activities/routines/practices. We believe that by categorizing networking behaviors based on their purposes produces a more fine-grained conceptualization, which will allow us to contrast networking in direct and indirect business relationships with the current business network literature.

Appendix B provides a detailed matrix relating to the content analysis of the interviews; in it the different themes are related to different respondents and their companies. In the following sub-sections we focus our discussion on explicating each type of networking behaviors, including its corresponding sub-types, by using quotes from the interviews.

6.1. Networking behavior type I: information acquisition

Information in this context can take many different forms. The desired information from the point of the focal company could relate to competitors, potential suppliers and customers, technological development, gaps in the market, local knowledge of a new market, etc. All of these aspects of information can be crucial for firms to sustain and grow their business. Information acquisition usually does not directly impact upon sales figures, but it is important for firms to obtain a whole range of information to make informed decisions and develop and improve their offerings (Cui & O'Connor, 2012). Subsequently, it will enhance the chance of performing better against competitors, and therefore, gaining such information regarding different aspects of the business network is an important motivation for firms to network. The Managing Director of Company B explained:

"... the information that you bring back in the organization, that is really key to our business. It's not about the sales or the profit. It's about the information. And then it's up to us what we do with that information."

Table 2

Types and sub-types of networking behaviors.

| Types of Networking Behaviors | Sub-types | Descriptions |
|---|---|---|
| Networking Behavior Type I Information Acquisition The activities/routines/practices that firms employ to acquire necessary/desired information for helping make informed decisions. | 1. Acquiring via business partners (trading relationships) 2. Acquiring via business contacts (non-trading relationships) 3. Acquiring via trade events | Firms utilize their business partners, such as important customers and suppliers, as the source of information. Firms utilize their business contacts, such as organizations operating in different industries, as the source of information. Firms utilize trade events, such as trade shows, trade-specific meetings and seminars, and trade organizations as the source of information. |
| Networking Behavior Type II Opportunity Enabling The activities/routines/practices that firms employ to sense the opportunities and build their reputation by consciously interacting with relevant parties in their business sphere. | 1. Sensing through networking events 2. Sensing/influencing through lobbying 3. Signaling self-perceived network identity | Firms attempt to interact with various counterparts in order to sense the opportunities. Firms attempt to influence the legislations in their favor by interacting with relevant governmental bodies and trade organizations. Firms attempt to build their reputation as an attractive partner by consciously working with well-regarded partners and by signaling their ability that matches their intended partners' needs. |
| Networking Behavior Type III Strong-tie Resource Mobilization The activities/routines/practices that firms employ to mobilize resources that are linked to their direct/established relationships. | 1. Mobilizing through adjusting resources 2. Mobilizing through transferring resources 3. Mobilizing through pooling resources | Firms adjust the level of relational investments based on the assessment of their overall relationship portfolio and the future benefit of maintaining the level of investment. Firms transfer resources across different relationships by using the synergies that they have built over a period of time with their important partners. Firms pool resources among two or more relationships in order to solve an identified issue or improve a process/offering. |
| Networking Behavior Type IV Weak-tie Resource Mobilization The activities/routines/practices that firms employ to mobilize resources that are linked to their indirect/less established/new relationships. | 1. Mobilizing through bridging weak-tie relationships 2. Mobilizing through bypassing-flanking 3. Mobilizing through bypassing-avoidance | Firms utilize a weak-tie relationship, such as a newly formed relationship with a partner in a new market, to get access to its local knowledge and its established web of relationships. Firms utilize a weak-tie relationship, such as an influential party to their targeted customers, to gain insight into customer preference and to influence demands. Firms identify and interact with potential partners through bypassing important network members, such as competitors. |

One prominent theme of this networking behavior, i.e., a sub-type, which we found in the data, relates to the knowledge of markets in which the focal firm operates or which it wishes to pursue. Globalization means that firms could market their offerings in many countries that can be very different from their home country. It is vital for a firm to establish an effective 'information hub' locally, from which it can acquire reliable information regarding local network dynamics. In some instances, firms need to keep abreast of local governmental regulations that could affect how its offerings are created (e.g., as part of supply chain considerations) and/or sold (e.g., as part of demand chain integration) in order to comply with those requirements (Handfield, Walton, Seegers, & Melnyk, 1997; Zhu & Sarkis, 2007). Depending on the nature of the information required, firms establish different contacts with various relevant parties in these foreign local markets. For instance, a participating company producing equipment that emits some form of carbon-dioxide needed to know local regulations regarding the standards regulating such emissions, and more importantly, how these regulations will be changed in the future. This is a vital piece of information because it affects how and when the firm develops the appropriate offerings and to whom they can sell, as the General Manager of Company C outlined:

"...we have quite a sophisticated and comprehensive group of people within the business that would work with local agencies whether it's the European Commission or, in North America, it could be the Senate."

We identified three important sources with which firms interact to acquire information, in this networking behavior type. First, the direct interaction partners, such as customers and suppliers, which are the first point of call when firms need to make sense of their current position in the market (i.e., against its competitors). The mutual understanding and trust between two parties in direct business relationships means that the information (often complex and/or valuable) is shared on the basis of the experience of their past dealings (Uzzi, 1996). As such, the

information is often 'shaped' to suit the circumstances of their relationship. Secondly, informal contacts or "unsolicited contacts" (mentioned by the Purchasing General Manager of Company C) that do not have trading relationships with the focal firm, are another important source of information, especially novel information (Cui & O'Connor, 2012). As such interactions are aimed at actors not in close relationships with the focal firm. These contacts could also transfer knowledge domains from their own sphere to that of the focal firm through infrequent interactions (e.g., via benchmarking across industry boundaries). Lastly, firms can gather a wide range of information from trade events, such as trade shows, trade associations, industry committee meetings and seminars.

The respondents identified customers as an important source of information, which has been widely researched in the supply chain literature (e.g., Nyaga, Whipple, & Lynch, 2010; Zhou & Benton, 2007) and the strategic network management literature (e.g., Dyer & Hatch, 2006; Gulati, 1999). Customers can provide insights into a focal firm's competitors without breaching the competition law. Although they cannot disclose sensitive information, such as pricing agreements or cost structure and production capacity of competitors, they nevertheless can offer insights into why the competitor in question is doing well in the market from a customer's perspective. This is valuable since information regarding competitors is difficult to obtain. The Sales and Engineering Director of Company J stated:

"Most of our information about competitors probably comes from our customers. Our customers have an interest in sharing information, on what our competitors are doing and we pick up on that."

Customers also provide their views of the market dynamics, which can foster innovation within the focal firm, as the General Manager of Company C explained:

"They [the customer] will often come to us and say we've seen another opportunity... we get a lot of our ideas through the customer base."

The multitude of channels where firms can obtain valuable information means that they need to identify important sources and establish relationships with them in order to form the base for (often exclusive) information sharing agreements. The findings from our qualitative work corroborate the strong-and-weak-tie argument in economic sociology. Based on a focal firm's web of direct and indirect relationships, various types of information can be mobilized and obtained by interacting with important direct counterparts, informal contacts (who are not necessarily trading with the focal firm) and in the trade events. Although novel information can be brought about by newly formed relationships, the information sharing governed by trust in established relationships can be the dominant mechanism for firms to realize the opportunities derived from acquiring novel information. Therefore, a combination of established, less-established, new and indirect relationships could place firms in a strategic position where they ensure reaping the benefits from being embedded in rich information environments. Interactions based on business exchanges are obviously important for obtaining information (as outlined in the INA, Håkansson & Wootz, 1979), but economic sociology has enriched these aspects of information acquisition by elaborating on the characteristics and functions of the strong- and weak-tie relationships and the strategic importance of wider informal and even indirect relationships within the business network.

6.2. Networking behavior type II: opportunity enabling

We identified three sub-areas of behaviors in the networking behavior type of business opportunity enabling (which is a more direct and goal-oriented behavior compared to information acquisition). First, the focal firms' tendency to network with different types of organizations within or outside of their industry was observed as a "go out there and speak to people" behavior, as the Managing Director of Company B put it. The channels, which firms use to sense and realize business opportunities, are similar to those for information acquisition. However, there exists one difference related to the fact that interactions are based on behaviors aimed directly at benefiting from being exposed to a wide range of familiar and especially unfamiliar organizations. That gives a focal firm the exposure to a wide range of potential suppliers and customers. Through attending seminars, conferences and exhibitions, and even through behaviors relating to "unsolicited contacts", firms sense and seize such opportunities. The majority of our respondents are in agreement that such 'Type II' efforts of networking behavior, e.g., attending trade events, are sometimes not as useful as expected. However, issues around opportunity enabling are seen to be of such importance that they nevertheless engage in these events and provide budgets for them. A certain fear exists that otherwise they would never know whether some opportunities might exist, and they might miss out on opportunities (or they are snapped up by their competitors). In this context the Managing Director of Company B argued:

"Now, you don't always find yourself as lucky as that in every networking event, but that is always the question that I always ask myself: if I don't go, what am I missing out on?"

The types of opportunities associated with this type of networking behavior vary. For instance, there might be potential buyers who are looking for certain offerings, potential suppliers who provide novel technologies that can be acquired to produce new offerings, or a referral could provide an opportunity for a firm to get in contact with potential customers. Opportunity enabling events are a fertile ground for firms to get together and sense the chances of collaboration, which might give them the edge against their competitors, if the collaboration can produce novel offerings, processes or business models. One participating company in a mature manufacturing industry has recently got involved in projects with companies from very different

industries. It all began with a trade fair where they first met their new partner and spoke 'casually' about the possibility of a collaboration that would benefit both parties. The Manufacturing Director of Company E explained:

"... a chance meeting got us into the footwear industry or the potential to get into the footwear industry, so it's hard to say where these things come from."

Furthermore, joining trade associations and industrial-specific committees (including lobbying groups) is another way of sensing opportunities. Through such organizations firms can influence demand by lobbying relevant legislative bodies to shape regulations, subsidies, standards, etc. However, this type of behavior is very specific to certain industries where legislation is heavily influential and directly affects business models, business relationships and offerings. Firms can also interact with various organizations to try and signal their own capabilities and, thereby, try to drive demand by building their reputation in the wider network. This set of behaviors can be named *network identity management*, based on a concept originating in Håkansson and Johanson (1988). They define network identity as "the views – both inside and outside the firm – about the firm's role and position in relation to other firms in the industrial network" (p. 373). Through interactions with various parties, firms can develop and build up their strategic network identity, as perceived by other actors. Thus, a firm's network identity can be managed and molded as part of networking behaviors, for example, by establishing connections with highly reputable suppliers or customers in the hope that other network members recognize the ability of the focal firm represented by the existence of these relationships. Such behavior was also represented by the companies in our research; the Sales and Engineering Director of Company J told us that having been working with 'big' players in the automotive industry has helped them get business easier due to the reputation brought about by continually working well with such highly reputable companies. The General Manager of Company C explained:

"There are other situations where we've worked for 10/15/20 years trying to get into a company that has a very strong brand that currently doesn't use any of our products, but we see it as strategically the right thing to do and that may take us many, many years to get to that point but we don't give up. We continue to-, you know, to try and gain those [reputable] relationships and produce products that we think will be of interest to them."

As the General Manager of Company C pointed out, it is a 'strategic' decision to keep pursuing a specific customer. Without the vision of where the firm wants to be in the network, the decision to work on reputation-enhancing relationships would not have been made. Therefore, network identity management represents a long-term strategic planning practice that needs to be continually assessed and nurtured. Although network identity has been defined as a self-perceived attractiveness to other network members, firms can manage their identity by strategically interacting with certain counterparts, make them aware of its capability or use their interactions to signal to others in the hope that they will become more attractive in the network (Anderson et al., 1994; Håkansson & Johanson, 1988).

6.3. Network behavior type III: strong-tie resource mobilization

Strong-tie relationships are characterized by high levels of trust, and therefore, they foster exchanges based on mutual understanding, which is developed over time (Dwyer, Schurr, & Oh, 1987; Ford, 1980). A well-established relationship may enable both parties to mobilize part of their counterparts' resources, as well as the resources, which are indirectly involved (e.g., customer's customer, customer's supplier or supplier's supplier). The main pre-requisite

for this to happen is a high level of trust between both parties in the strong-tie relationship. This aspect of resource mobilization is particularly important as a mechanism to solve an identified problem that requires multiple parties' involvement in order to come up with a solution that would warrant an on-going cooperation (Ford et al., 2001). The Sales and Marketing Director of Company F explained:

"If they aren't happy with the trays that the supplier is using, then somebody like Customer A will tend to put us in touch with [customer A's supplier] and then we can come up with a different type of tray."

There are three different sub-types of resource mobilization in Type III networking behaviors. First, *resource adjusting* concerns the adjustment of invested resources in the existing relationships based on a focal firm's assessment of anticipated positive or negative effects (Anderson et al., 1994). It means that firms have to decide as to whether investments should be made, should be continued, and at what level these investments should be kept (Anderson et al., 1994). A Firm needs to assess the possible pooling of resources that are linked with a particular counterpart and envisage how benefits from those resources will fit with its future offering development needs. The General Manager of Company C explained how they decided to increase relationship-specific investments with a supplier:

"We want to move-, let's say we want to move into some of the emerging countries and markets that are becoming available to us and we see that, for example, the products that that market demands or that country demands we don't currently have but we know that a supplier is working in another part of the world and has that capability, we would move them into a more strategic partnership arrangement for a given period in a given market."

Secondly, *resource transferring* networking behavior is also important for firms to utilize resource synergies, which they could gain from working with similar types of counterparts, as the associated learning can often be transferred across other relationships (Anderson et al., 1994). It means that firms could manage similar business relationships in an isomorphic manner, which forms an efficient and effective aspect of resource usage via common routines and practices, as mentioned by the General Manager of Company C:

"We know the synergies between some of these organizations and our product planning and how that aligns and down-, right down to some of the more regional smaller customers."

Thirdly, *resource pooling* can take place in one or more relationships. In the case of more than one relationship a focal firm could coordinate between its supplier and its customer and try to marry its supplier's capability with its own in order to provide offerings that meets customer's needs. Therefore, the supplier does not merely provide raw material or a component to go into a firm's offering, its involvement in the process of offering development means that the synergy produced by the cooperation cannot be imitated easily by competition. The General Manager of Company C observed:

"...a lot of our products are only successful as a result of the innovation that the suppliers bring, the added value that the supplier brings."

The resource pooling behavior is similar to those described in Smith and Laage-Hellman (1992). They argue that firms can either pool resources in existing or in new relationships. However, we found that to pool resources, firms need to build a certain minimum level of trust and mutual understanding before they could combine resources in newly formed relationships. In other words, established relationships are better suited for this purpose. This view is consistent with the strong-and-weak-tie argument as trust is the catalyst for successful resource pooling (Finch, Wagner, & Hynes, 2010; Uzzi & Gillespie, 2002).

Strong-tie relationships play a critical part in mobilizing resources around a focal firm. Networks are rich in resources (and information), but firms need to understand and mobilize them. Interactions play an important role in networking behaviors of Type III, but it is the mutual understanding and trust of strong-tie relationships that serve as the foundation to enable firms to exploit such resource environments (Zaefarian, Henneberg, & Naudé, 2011). Resource mobilization in this context is not confined within a relationship between two parties, but multiple parties can be involved to form "*resource constellation*" (Ford, Gadde, Håkansson, & Snehota, 2006, p. 34). In addition, the empirical study of Roseira, Brito, and Henneberg (2010) provides evidence that a buyer can mobilize resources among its suppliers in its favor, even in the case of there being no or limited direct links between those suppliers.

6.4. Networking behavior type IV: weak-tie resource mobilization

Unlike strong-tie relationships, weak-tie relationships are characterized by lower levels of trust as the interactions between two parties are not usually as frequent as in strong-tie relationships, and partners keep each other at arm's length. However, such weak-tie relationships are important in some instances where firms need to quickly penetrate a new market or obtain novel knowledge in a new area, which cannot be obtained through strong-tie relationships. Networking behaviors in this type are partly about changing the formation of the existing relationships in the network, which involves introducing new relationships by ways of either utilizing existing weak tie relationships or making links with the new counterparts (Smith & Laage-Hellman, 1992).

There are three ways of utilizing weak tie relationships in Type IV networking behaviors, depending on a focal firm's underlying goals. The main goals, mentioned by the managers, are *bridging*, *bypassing-flanking* and *bypassing-avoidance*. These different concepts can also be related to Smith and Laage-Hellman's work (1992); we adopt some of their terms to describe the weak-tie-based networking behaviors. First, when going to a new foreign market, the language and cultural barriers have been mentioned by several respondents as one of the issues that stand in the way of establishing business relationships with local customers and suppliers (Johanson & Vahlne, 1977). Firms initially resolve the issues by using a local distributor or agent as a partner instead of setting up their own operations locally to reduce the risk of possible failure. Through the local partner(s) they then establish local connections (i.e., local suppliers and customers). Our empirical findings are in line with the International Process Model (Johanson & Vahlne, 1977, 2009), suggesting that a firm initially utilizes newly formed relationships with the view to reduce the risk of failing and exploit the resources such relationships potentially offer. Through nurturing relationships (as long as there are foreseeable benefits), a firm can gradually capitalize on the local knowledge, resources and established relationships, which their new partners have.

The search for a suitable business partner locally can be time-consuming, and it takes various forms of preparation. The General Manager of Company C described the process of choosing a suitable local partner as a "calculated gamble", because it is difficult to foresee how well two parties can work together without having any experiences with regard to each other, albeit due diligence assessments. However, once a working relationship is established, the benefits of quickly capitalizing on the web of the supplier and customer base that the local business partner provides are an important conduit for penetrating a new market. Through utilizing the resources and market-specific expertise of the local partner, a firm can establish relationships with potential customers and with new suppliers much quicker and more effectively. We call this way of networking behavior *bridging*, where firms identify the best-suited partner locally in order to utilize its established network of relationships and the accompanied rich information and resources that come with it. Although this sub-type of Type IV networking behavior is particularly

applicable to operations in a foreign market, we also found that it is equally applicable in a local market when a firm is faced with a less familiar territory or an unfamiliar potential customer. The Sales and Marketing Director of Company F described this behavior:

“Once we look to build a relationship up with a supermarket, they will then tell us who their suppliers are and we’ll look to build up relationships with their suppliers. And so therefore we’re always putting new people into the part as regards potential customers.”

Secondly, firms sometimes need to make connections and interact with peripheral yet relevant key actors, which are surrounding their existing or potential customers and suppliers. Although these actors do not contribute directly to sales, the novel possibilities of new resource combination residing in their involvement could be crucial for firms. We term this way of networking *bypassing-flanking* as firms can go past their direct customers or suppliers and try to interact with relevant parties surrounding specific target organizations (e.g., important or potential customers) in order to influence the demand for their offerings. The final aim of this tactic is to try to be closer to target customers or suppliers (thus flanking). The Head of Purchasing of Company A stressed that:

“We have a very big sales force, many of who are targeting on meeting the specifiers [who are not their customers, i.e., they do not purchase the offerings, but specify them] and meeting the end users and trying to help them with their technical problems and making sure our product is specified and subsequently purchased by the customers.”

Thirdly, a different bypassing networking behavior was observed, where firms identify their direct competitors’ customers or suppliers, and try to approach them in order to expand their business. We call this *bypassing-avoidance* networking behavior. This situation often happens when firms enter a new market, which their competitors are already operating in, and have an established network of customers and/or suppliers. It could also happen in existing markets where new customers are rare, and the only way of growing the business is by “*grabbing competitors’ market share*” as the Sales Manager of Company K explained:

“...you go to a man with a pump and we know where our pumps are used, so in a new market, we could go to a place where he has someone else’s pump. So we go and ask him questions like ‘are you getting the service you require for this product, can you get the spares easily, is your pump easy to maintain’, for example.”

6.5. Synthesizing networking behavior types

The results of the content analysis (see Appendix B) reveal that, at an aggregate level, all of the participating companies, except Company H, utilize all four types of networking behaviors, with at least one sub-type being mentioned in each interview. The multi-respondent approach has allowed us to capture this holistic picture of how the members of a focal firm, collectively, network to try to grasp the dynamics of the network and further utilize their understanding to interact with others in order to achieve their networking behavior goals. We infer that the reason why Company H does not have any Type IV networking behavior, i.e., the weak-tie resource mobilization, is related to the characteristics of the company and the network position it occupies. We observe that this company is the smallest across all the participating companies with 48 employees, and that it does not have the ‘vision’ to mobilize resources further afield, e.g., going beyond direct relationships. It could be that because of its size, its limited resource pool does not allow it to invest in such networking behaviors with indirect partners, which arguably requires a long-term orientation of an organizational vision as well as attractive resources (to others) or a superior reputation

in the network. We also observe that lobbying is a very specific sub-type of networking behavior that is crucially important to companies operating in close proximity to the public sector, and in industries where governmental regulations are highly influential. Only Companies A, C and L revealed that they lobby to influence how the relevant regulations are shaped and implemented.

Overall, these four types of networking behaviors are *essential* at an aggregate level to our participating UK manufacturing firms for understanding their position in the network and capitalizing on that position. However, when assessing how firms network at the sub-type level, there are differences across companies due to their unique organizational characteristics, the industry specifics and the company’s network position. Thus, the effectiveness of different networking behaviors also depends on the unique combination of each firm’s characteristics (e.g., the size, the complexity of its offerings and management style), the relationship portfolio and the network dynamics in the wider environment.

The typology we developed in this study is different from those existing concepts in the relevant research areas (see Table 1) because of the theoretical interaction perspective (based on the INA) we employed, as well as due to the consideration of particular network characteristics in our conceptualization. Our typology of networking behaviors is defined by the purposes of focal firms, which share a similar rationale with the work of Zaefarian et al. (2011). They suggest that firms can utilize five resource acquisition strategies to gain access to the resources that reside in their direct business relationships. However, our typology differs from their resource acquisition strategies in two ways. First, our conceptualization of networking behavior considers the resources available to firms in a wider context, including both direct and indirect relationships, as opposed to firms’ relationship portfolio alone (i.e., direct relationships only). Secondly, the conceptualization of networking behavior incorporates both strong- and weak-tie relationships, and makes clear that they serve different purposes. Therefore, our typology enhances the resource acquisition strategies framework by taking into consideration a wider context, i.e., the embeddedness and interconnectedness of direct and indirect relationships, including resources embedded in those indirect relationships.

7. Discussion

We have identified four types of organizational networking behaviors by the way in which firms utilize their web of relationships to achieve different goals. These purposeful behaviors can be categorized into: *information acquisition*, *opportunity enabling*, *strong-tie resource mobilization* and *weak-tie resource mobilization*. These networking behaviors are both reactive and proactive in nature. Firms need to network to sense the network dynamics in order to respond to the changes that might have a negative impact if not dealt with timeously and appropriately (reactive networking behaviors). On the other hand, firms can actively maneuver themselves into a position where they are able to capture the benefit of mobilizing certain desired resource through interacting with relevant counterparts (proactive networking behaviors).

By adopting a network view through using an interaction approach, this study provides insights into how firms operating in business markets exploit their webs of relationships with a multitude of counterparts. We did not restrict ourselves to one perspective, nor did we rely purely on literature or empirical data. Instead, we employed the systematic combining approach using abductive reasoning, and the strong-and-weak-tie argument originating from economic sociology to complement the interaction approach, both of which provide the theoretical framework for analyzing the data.

7.1. Findings

First, information acquisition is an important aspect of business development. Although how firms utilize the information they obtain through

networking behaviors is out of the scope of this study, through 'useful' information firms can, for example, improve their offerings. Based on our empirical data, we found that firms are more openly sharing information in well-established relationships, but the novel information very often come about via other types of counterparts, with which firms do not necessarily have long-term, established relationships. This stresses the importance of identifying and keeping a wide range of 'information hubs' through constantly interacting with various counterparts, although it might not necessarily contribute directly to sales.

Secondly, opportunity enabling behaviors are ways in which firms constantly have a strong desire to 'go out there and speak to people', whether they be looking out for new technologies, potential customers and suppliers, lobbying, etc., all of which require proactive interactions with various counterparts. As noted by several managers, the effectiveness of these networking behaviors cannot be predicted easily, but the strong tendency to network with various counterparts is essential for firms that are constantly trying to sense and seize opportunities. Not only do firms seek opportunities, but create them. By interacting with relevant network members (e.g., potential customers and important parties surrounding customers) firms can strategically disseminate their self-perceived network identity to these network members. This has important implications, as firms can greatly benefit from their reputation within the network to improve their network positions (Anderson et al., 1994; Håkansson & Johanson, 1988).

Thirdly, we also observed that the effectiveness of certain networking behaviors, particularly those in strong-tie resource mobilization, rely heavily on the quality of the relationships and whether or not these relationships are characterized by a high level of trust. In other words, to be able to mobilize resources surrounding a focal relationship requires high levels of trust and cooperation in that relationship. This ability is critical for solving problems and improving offerings, particularly in technology-intensive environments. By mobilizing resources, such as technologies or know-how from different parties, a focal firm's offerings can be developed in order to differentiate them from those of the competitors'. Without the backing of strong relationships, the mobilization of such 'sticky' resources to form a joint problem-solving mechanism would be difficult as they are often complex and valuable (Uzzi, 1996). Therefore, not only does a good relationship help to sustain repeating transactions, but it also brings about rich resources that are only accessible for a focal firm through the interactions as part of these relationships. However, firms need to sense and realize this potential opportunity and mobilize the resources to respond to the market and innovate faster, which increases competitiveness (Mouzas & Naudé, 2007).

Lastly, weak-tie resource mobilization has shown to be effective in some instances, particularly where firms need to penetrate a new market. Relationships that are at arm's length or newly formed could link firms to those indirect relationships, hence potentially a whole new set of resources. The novel information, technologies and business opportunities are embedded in the other side of this 'bridging' relationship, and through its linkages with its less established counterparts, a firm is able to quickly form relationships with others. In some cases, this can be planned and managed. Firms are able to assess, for instance, what kind of customer base a particular potential business partner holds to determine whether it is the right decision to initiate and form a new partnership (Anderson et al., 1994).

7.2. Theoretical and practical implications

This study provides three theoretical contributions to the existing literature. First, we conceptualize organizational networking behavior through the lens of an interaction approach based on the INA since networking is interactive, conscious and strategic in nature. Firms utilize networking behavior as the means to cope with the embeddedness,

interconnectedness and the resulting complexity of their web of direct and indirect relationships.

Secondly, the four types of purposeful organizational networking behaviors are identified, and differentiated from other network management studies in the literature. The contribution does not lie in the individual components we have identified as part of the empirical study. Rather, it rests in the totality of all four types and sub-types of networking behaviors and how they are systematically identified. Using Day's (1994) categorization of organizational capabilities to interpret our findings, we demonstrate that networking behaviors are not only about 'inside-out capabilities' (qualification practices), but especially about 'outside-in capabilities' (strategizing practices). Networking behaviors as strategizing in business networks and thus can be viewed as the systematic configurations of the comprehensive four types and their sub-types.

Thirdly, this study demonstrates the applicability of the established strong-and-weak-tie hypothesis in economic sociology from a focal firm's perspective. By introducing the specifics of the strong-and-weak-tie concept (e.g., the unique information and opportunities brought about by the network structure), this study has enriched the understanding of networking behaviors from an interaction perspective. This approach has helped to produce a more fine-grained typology of organizational networking behaviors. Although the strong-and-weak-tie approach is a well developed concept, a deeper understanding is needed to shed light on how different types of business relationships can be utilized from a firm's perspective, as the concept was originally developed to capture personal relationships (Jack, 2005). This study demonstrates that the 'tie' approach provides insights into the different utilities and purposes of business relationships from a focal firm's perspective, i.e., the strong-tie resource mobilization and the weak-tie resource mobilization.

The four types of networking behaviors can provide practitioners operating in business markets with a guideline for utilizing different types of relationships to achieve different outcomes. Based on our findings, we suggest that manufacturing firms in the UK should more carefully plan and configure their usage of the four types of networking behaviors according to their circumstances, e.g., their organizational characteristics, self-perceived network identity, or the dynamics in their networks. The effectiveness of the networking behaviors is conditioned by these factors. Particularly, some sub-types of networking behaviors might require more investments than the others, depending on the circumstances of a firm, and therefore, firms need to be mindful of how likely their anticipated networking outcomes can be realized in a given time frame. Furthermore, certain sub-types of networking behaviors (particularly those in the weak-tie resource mobilization, and in opportunity enabling) require longer-term investments, the outcome of which is not easily foreseeable. Due to this reason, firms might not be forthcoming with these networking behaviors. On the other hand, certain sub-types of networking behaviors might cost little for firms, such as acquiring information through a wide range of counterparts, but they could potentially generate an enormous benefit. Therefore, firms need to carefully plan these different types of networking activities/routines/practices, using a portfolio approach, to maximize the utility their network context can afford.

7.3. Limitations and future research

We acknowledge that this study has limitations, mainly related to the research setting. We study organizational networking behaviors in the context of the UK manufacturing sector. Although we tried to cover as many industries as possible, the coverage is still limited. There is a possibility that other types of networking behaviors are not discovered due to this limitation. It is, therefore, possibly fertile to look at this issue in future research and in other research settings. For instance, although we observed that firms in high technology industries heavily rely on mobilizing resources in their networks, the

number of the firms we interviewed in those industries is too small to generate further insights into how they network. Therefore, future research may follow this line of study to investigate the networking behaviors of firms in high technology industries specifically to provide an understanding regarding how the networking behaviors differ from the ones we have identified in this study. Furthermore, the service industry is arguably very different from the manufacturing industry, which makes it a possible research setting to study, thereby

contrasting manufacturing firms' networking behaviors. The four types of networking behaviors we identified also provide a foundation for future research to further refine and operationalize the construct. It would be necessary to ascertain whether these four types are in fact different, and the extent to which they are related to other organizational behaviors (e.g., relational capabilities) and firm performance under different contextual factors (e.g., high vs. low environmental turbulence).

Appendix A. Profile of participating companies and respondents

| Company UK SIC 2007 description | Latest no of employees | Turnover (last available year, thousand GBP) | Job title |
|--|---------------------------|---|--|
| A Manufacture of other fabricated metal products | 296 | 153,646 | A1 UK Sales Director (Commercial) A2 Head of Purchasing |
| B Manufacture of medical and dental instruments and supplies | 76 | 10,622 | B1 Managing Director B2 Operation Director |
| C Manufacture of engines and turbines, except aircraft, vehicle and cycle engines | 3310 | 1,373,528 | C1 General Manager (Business Unit 1) C2 General Manager (Business Unit 2) C3 Purchasing General Manager – Europe |
| D Manufacture of tools | 49 | 4,000 (approx.) | D1 Commercial Director D2 General Manager |
| E Manufacture of mattresses | 211 | 24,834 | E1 Sales Director E2 Manufacturing Director |
| F Manufacture of other plastic products | 352 | 61,180 | F1 Sales and Marketing Director F2 Managing Director |
| G Cold drawing of bars | 144 | 27,492 | G1 Commercial Manager G2 Marketing and Sales Director |
| H Manufacture of wallpaper | 48 | 37,076 | H1 Technical Manager H2 Purchasing Manager |
| I Machining | 208 | 18,406 | I1 Business Development Manager I2 Chief Executive |
| J Manufacture of plastics in primary forms | 355 | 31,058 | J1 Sales & Engineering Director J2 Material Planning and Logistics Director |
| K Manufacture of pumps | 340 | 44,107 | K1 Group Managing Director K2 European Sales Manager |
| L Other manufacturing | 192 | 34,547 | L1 Managing Director L2 Key Account Director |
| M Manufacture of other articles of paper and paperboard | 2982 | 137,293 | M1 Supply Chain Director M2 International Marketing Director |
| N Manufacture of glues | 1207 | 192,300 | N1 Business Development Director N2 Head of Global Supply Chain N3 Director of European Sales |
| O Other processing and preserving of fruit and vegetables | 537 | 107,872 | O1 Supply Chain Director |

Appendix B. Matrix of content analysis

| Company | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O |
|---|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|
| Interviewee | 1 2 | 1 2 | 1 2 3 | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 3 | 1 |
| <i>I. Information Acquisition</i> | | | | | | | | | | | | | | | |
| 1. Acquiring via business partners | 1 1 | 1 1 | 1 1 | 1 0 | 1 1 | 1 1 | 1 0 | 0 0 | 1 0 | 1 1 | 1 1 | 1 1 | 1 0 | 1 1 | 1 0 |
| 2. Acquiring via business contacts | 1 1 | 1 0 | 1 0 | 0 0 | 0 0 | 0 0 | 1 0 | 0 0 | 0 0 | 1 1 | 0 1 | 0 0 | 0 0 | 1 0 | 0 1 |
| 3. Acquiring via trade events | 1 0 | 1 1 | 0 1 | 1 1 | 0 1 | 0 0 | 1 1 | 1 1 | 1 0 | 1 1 | 1 1 | 1 1 | 1 0 | 1 1 | 1 1 |
| <i>II. Opportunity Enabling</i> | | | | | | | | | | | | | | | |
| 1. Sensing through networking events | 1 1 | 1 0 | 0 1 | 1 1 | 1 1 | 0 1 | 1 1 | 1 1 | 1 1 | 1 1 | 1 1 | 1 1 | 1 1 | 0 1 | 1 1 |
| 2. Sensing/influencing through lobbying | 0 1 | 0 0 | 1 0 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 1 0 | 0 0 | 0 0 | 0 0 |
| 3. Signaling self-perceived network identity | 1 1 | 1 0 | 1 1 | 1 0 | 1 1 | 1 1 | 0 0 | 1 1 | 1 1 | 0 0 | 1 0 | 1 0 | 0 0 | 1 1 | 1 1 |
| <i>III. Strong-tie Resource Mobilization</i> | | | | | | | | | | | | | | | |
| 1. Mobilizing through adjusting resources | 1 1 | 1 1 | 1 1 | 1 1 | 1 0 | 1 0 | 1 1 | 0 0 | 1 0 | 0 0 | 1 0 | 1 1 | 1 0 | 0 1 | 0 0 |
| 2. Mobilizing through transferring resources | 0 0 | 1 0 | 0 1 | 1 0 | 0 1 | 0 0 | 0 0 | 1 0 | 0 0 | 1 0 | 1 0 | 1 0 | 1 0 | 0 1 | 0 0 |
| 3. Mobilizing through pooling resources | 1 0 | 1 1 | 1 1 | 1 1 | 0 1 | 0 1 | 1 1 | 1 1 | 1 1 | 1 1 | 1 0 | 1 1 | 1 1 | 1 0 | 0 1 |
| <i>IV. Weak-tie Resource Mobilization</i> | | | | | | | | | | | | | | | |
| 1. Mobilizing through bridging weak-tie relationships | 0 0 | 1 0 | 1 1 | 1 1 | 1 1 | 1 0 | 0 1 | 0 0 | 1 0 | 0 0 | 1 1 | 1 0 | 0 1 | 0 1 | 1 0 |
| 2. Mobilizing through bypassing-flanking | 1 1 | 1 0 | 0 0 | 0 0 | 0 0 | 1 1 | 0 0 | 0 0 | 0 0 | 1 0 | 0 1 | 0 1 | 0 0 | 1 0 | 0 0 |
| 3. Mobilizing through bypassing-avoidance | 0 0 | 0 0 | 0 0 | 0 0 | 1 1 | 0 0 | 1 1 | 1 0 | 0 0 | 0 0 | 1 1 | 0 0 | 1 0 | 0 0 | 1 1 |

* 0 denotes the absence of the theme in the interview, whereas 1 denotes the presence of the theme in the interview.

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