Network picturing: An action research study of strategizing in business networks

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A R T I C L E   I N F O

A B S T R A C T

Our paper is concerned with how managers understand their surrounding network and what strategic actions they take based on this insight. Recent research in the areas of network management and business relationships shows increasing interest in the interplay between cognition and action, particularly on how managers relate perceptions about their business network ("network picturing") to decision-making and strategizing activities. In this study, we apply a novel research approach combining process research and action research methodology. Our sample is introduced to business network theories and concepts, and the use and adaptation of these concepts results in managerial options being articulated and applied. Our findings add new insight in the field of network strategy and network picturing. Network picturing represents a way to understand the boundaries of the firm and how this understanding affects managers' decisions. This differs from the fundamental distinction between the external and the internal environments of classical strategy analysis. In terms of network picturing, strategizing is a way to understand the resulting actions or network outcomes that managers see as viable within their surrounding network. We also provide a conceptual process exercise as an example of how this insight can be relevant for managers in their decision-making processes.

1. Introduction

Companies need to make strategic decisions in order to survive and prosper. Relational theories claim that such decisions are particularly concerned with the issue of how a firm should relate to other companies and actors, how it interacts with them, and responds to their actions (Gadde et al., 2003; Holmen & Pedersen, 2003) This is due to the fact that firms need to mobilize resources by interacting with other companies, such as suppliers and customers (Håkansson & Waluszewski, 2002; Mouzas & Naudè, 2007; Pfeffer & Salancik, 1978). Strategic decisions about how to build business relationships are therefore of key importance, as a company's success or failure is closely connected to the outcome of these actions. Central to strategic decision-making in business relationships is the activity of *strategizing*, which concerns choices about how to interact with, and mobilize as well as influence, other actors through connected business relationships (Gadde et al., 2003).

One way to understand how companies, or more precisely the managers within such companies, seek to strategize is to understand their *cognition* and *sensemaking*, which provides insights into the 'theories-in-use' that they apply when making decisions (Argyris, 1978; Cornelissen, 2002). Of particular interest with regard to their decisions

is the concept of managers' *network pictures*. Network pictures are managers' theories-in-use about their business network, i.e. how they make sense of their network of connected relationships (their environment), how they perceive strategizing options, and how they evaluate these collectively (Geiger & Finch, 2010; Henneberg et al., 2006). While several studies have developed an understanding of the structures and characteristics of network pictures, as well as the behavioral outcomes (Abrahamsen et al., 2012; Corsaro et al., 2011; Henneberg et al., 2006, 2009; Kragh & Andersen, 2009), the *managerial process*, i.e. the specifics about how managers use their understanding of the network to prepare, evaluate, and make strategizing decisions, has remained somewhat unexplored. In line with Ramos et al. (2012) and Henneberg et al. (2010) we refer to this managerial process as *network picturing*.

Thus, we are concerned with network picturing as the interplay between cognition and action, in particular relating to what managers perceive (their network picture) and what they do (their strategizing activities). These two aspects as part of network picturing, i.e. understanding the network on the one hand and strategizing on the other, are linked together through an evaluation of available strategic options. To understand this interplay, our research is based on a specific case study, seeking both conceptual knowledge development as well as managerial problem-solving. This research approach highlights the managerial relevance of the research outcomes, and the problem-solving involvement by the participating researchers (Gibbons et al.,

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1994; van Aken, 2005). Using network pictures, as well as other network- and relational concepts associated with the industrial network approach, an intervention-based longitudinal study with top managers of a case company explores the network picturing processes, learnings, applications, and adaptations with regard to their strategic decisions. Thus, we as researchers deliberately intervene in the process at different points in time (by providing conceptual input, as well as suggestions for strategizing tools), and then observe the outcome of these interventions.

Our main contribution is therefore to fill a theoretical gap in the literature with regard to the conceptual understanding of managers' network pictures and how such network pictures are used in managers' strategizing decisions. This results in a better understanding of the network picturing processes within a group of managers in a complex business network environment. As such, we explore the use of network pictures in a novel setting, which complements the existing strategy and management literature and provides, to the best of our knowledge, the first action research study within the industrial network research tradition (see McGrath and O'Toole, 2012, for a discussion of action research design in network related studies).

The paper starts with a discussion of how actors relate to their wider business environment. Implications for strategizing in networks are discussed, and network picturing is introduced as one way of understanding how strategizing decisions are affected. The rationale for adopting an action research design is introduced and the case company as well as the research process is described. Finally, we discuss our findings, both from an empirical point of view, as well as their implications for theory, before we propose some managerial implications.

2. Strategizing and the industrial network approach

Within the industrial network approach (also known as the IMP approach), an actor's ability to act seems somewhat limited because of an infinite web of ties within the business network which leads some authors to perceive only limited importance for strategizing activities: "*Accordingly, to suggest strategies for action is problematic: The sheer unknowability of effects and outcomes in a network means that we may even conclude that the effectiveness of strategic business decisions over time is likely to be largely a matter of luck!*" (Ford & Mouzas, 2007, p. 8). Still, while outcomes of strategic decisions may be uncertain, it is possible to say something about strategies, strategizing, and the interplay with the characteristics of business networks. Recently, such issues have become a topic for further research within the IMP tradition (Baraldi et al., 2007).

In this research tradition, strategy and strategizing has become an issue of handling the complexity of relational interdependence; moreover "*strategic action is defined as efforts of a firm to influence its position in the network of which it is part.*" (Gadde et al., 2003, p. 358). In a network, an actor has a distinct *network position* based on its connected business relationships (Abrahamsen et al., 2012; Zaheer & Bell, 2005). These relationships or dyads can be understood in terms of how the resources are tied together, how the activities are linked, and how the different actors interact, also known as the ARA-model (Håkansson & Snehota, 1995). In networking terms, strategizing is concerned with choices related to 'how to network', i.e. how to manage in business relationships and affect one's network position. Networking is seen as "*managers' attempts to change and develop interactions and relationships with others*" (Håkansson et al., 2009, p. 195). Håkansson et al. (2009) suggest three aspects of networking related to strategic choice. The first relates to choices within existing relationships, linked to opportunities and limitations in business networks (Håkansson & Ford, 2001). The second is concerned with choices about position within the business network, and relates to decisions about how a company is simultaneously influencing and being influenced by its network. The third is concerned with how to network, where a company is exerting control over and at the same time is being controlled by other actors. However,

such networking decisions are preceded by a specific understanding of the embedding network, by the 'theories-in-use' which managers form about the network, its characteristics, and therefore its options and rigidities (Henneberg et al., 2006). Such issues can be discussed in terms of how actors make sense of the business network, i.e. how they form their *network pictures* and how they reach strategizing decisions, or their *network picturing*.

3. Strategizing and network pictures

Networking decisions can best be seen in relation to the *network pictures* that actors have of their surrounding network. According to the industrial network approach, these concepts are related to each other within the *managing in networks*—model, consisting of three different dimensions: network pictures, networking activities, and network outcomes (Ford et al., 2011; Håkansson et al., 2009). These three dimensions are all interconnected. Actors have their individual network pictures or perceptions of their network, based on their experience from previous interactions with other actors, as well as based on expectations about the future (Henneberg et al., 2006). Network pictures may be idiosyncratic or related to common views and stereotypes related to certain types of network (Cornelissen, 2002), thereby subjectively explaining who should do what in the network, who is in control of the network, why certain outcomes occur in the network, etc. The network pictures concept suggests that an actor interacts with the network on the basis of his/her personal interpretation of the network (Abrahamsen et al., 2012; Henneberg et al., 2006; Henneberg et al., 2010; Mouzas et al., 2008). Network pictures are seen as a way of representing actors' knowledge of their network, i.e. as managers' network theories (Mattsson, 1984, 1987) helping them to make sense of their complex environment and to guide their decision-making and managerial behavior (Cornelissen, 2002; Welch & Wilkinson, 2002). Based on such sensemaking about the network, managers engage in *network picturing*, transforming their subjective knowledge about the business network into managerial options about certain possible *networking activities* and likely outcomes of these. Based on the resulting option analysis of possible network activities, firms strategize by choosing and enacting certain options. As companies interact in different business relationships based on their network picturing and strategizing decisions, this process results in certain network outcomes. Such network outcomes can relate to a single actor, the dyad (business relationship), or the wider network.

This activity perspective of strategizing in networks acknowledges that the strategic problem for the individual firm is to participate in the process of dynamic interactions, and being seen as a viable participant in the networks that evolve (Wilkinson & Young, 2002). Strategizing is therefore concerned with choices regarding how to interact with, and mobilize as well as influence, other actors through connected business relationships (Gadde et al., 2003). Rather than pursuing 'victory' over others based on firm-specific resources, activities or monopoly-like industry positions, "*…strategic thinking involves a company coping with all of those with which it has important relationships or on which it depends, including its suppliers, customers as well as its competitors.*" (Ford et al., 2011, p. 3). These interaction and mobilization choices will affect a company's network position, i.e. how it relates to others in the business network, which in turn affects its performance, in terms of resource availability or sales opportunities (Håkansson et al., 2009; Johanson & Mattsson, 1992; Turnbull et al., 1996). Making sense of and assessing interaction via network picturing, or understanding one's own network picture as well as those held by other actors (Henneberg et al., 2010), is a vital part in this type of strategic analysis as "*…no manager has a complete view of the network and each has to interact with others to try to learn from them or to convince them about their view*" (Håkansson et al., 2009, p. 194).

While recent research has looked at characteristics of network pictures (Colville & Pye, 2010; Geiger & Finch, 2010; Henneberg et al.,