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PAPER TITLE:

Investigating strategy tools from an interactive perspective

ABSTRACT (250 words)

Purpose: This paper investigates how the strategic management concept of 'strategy tools' can be reinterpreted from an industrial network perspective. It considers how strategy tools are used to influence the substance of relationships and how firms engage in strategic action by using such tools.

Design/methodology/approach: Using case study research involving three focal firms, the paper scrutinizes use of selected strategy tools to examine how they are used to systematically relate to others and create benefits and affect development paths in business relationships.

Findings: Strategy tools can be viewed as an integrated part of a networking pattern of mobilizing resources, linking activities and relating actors. Seen in this manner, use of strategy tools can be interaction-facilitating or interaction-creating.

Research limitations/implications: In an interactive approach, strategy tools must be seen in relation to others as they are used in strategic (co-)action to engage and involve others. In this view, tools are strategic when used to affect the long-term development of important business relationships.

Practical implications: Practitioners should acknowledge that the use of a strategy tool to handle counterparts is emerging, and valuable only in relation to specific others. Because the value of strategy tools is unknowable until it is revealed how they can affect the substance of a specific relationship, there is no best-practice or one-size-fits-all approach.

Originality/ value: This paper illuminates the phenomenon of 'strategy tools' by considering it from both sides of the business exchange interface.

Keywords: strategy tools, strategic action, strategizing in networks, ARA model, Strategy-as-Practice

Paper type: Research paper

1. Introduction

Studies show how an interactive interpretation of the business landscape presented by the industrial network approach impacts how firms are assumed to act strategically (Gadde et al., 2003; Ritter et al., 2004; Baraldi, 2008). Moving away from traditional interpretations of firms acting according to previously formulated plans based on the best possible use of internal resources, these studies illustrate that strategizing can be considered "interactive, evolutionary and responsive" (Håkansson and Ford, 2002, p. 137). With the assumption that firms are embedded in relationships with several important counterparts (Håkansson and Snehota, 1989), strategic action is addressed from an industrial network approach (INA) with reference to firms' embeddedness in business networks (Johanson and Mattsson, 1992). Therefore, in investigating how firms try to influence their strategic position and that of others, the systematic relation to others is emphasized (Håkansson and Snehota, 2006). Therein, strategic action is not being practiced "on" others, as depicted in general strategy literature; rather, strategizing encompasses action and reaction (Håkansson and Ford, 2002; Ford and Mouzas, 2013).

With this interactive interpretation, we revisit so-called 'strategy tools' (STs), a term typically associated with mainstream strategic management (Bowman et al., 2002; Rigby, 2001). STs have generally been defined as the "numerous techniques, tools, methods, models, frameworks, approaches and methodologies that are available to support decision making within strategic management" (Clark, 1997, p. 417). One research field that has extensively studied STs in terms of the "stuff" or "things" managers use daily in acting strategically is strategy-as-practice (SaP). SaP denotes STs as a subset of practices (Whittington, 2006; Jarzabkowski and Wilson, 2006), and interpretation of STs has broadened of late through this empirically grounded approach (Kaplan and Jarzabkowski, 2006). Along this vein, STs can be conceptual, process-related or physical (Stenfors, 2007). Conceptual tools include frameworks such as SWOT (SWOT being the acronym for "strengths, weaknesses, opportunities and threats"), five forces analysis or portfolio matrices, while process-related tools can comprise checklists or project management templates. Physical tools can encompass computers and documents, or even PowerPoint slides (Kaplan, 2011). Simultaneously, strategy workshops and away days—in other words, taking time out from day-to-day routines to deliberate on the longer-term direction of the firm—have also been scrutinized as STs in SaP studies (Hodgkinson et al., 2006).

However, while presenting a more empirically derived and broader view of strategy and strategy-making than mainstream strategic management, SaP departs from specific ideas about the business landscape and consequently has a particular interpretation of what influences the firm's strategy process. Coming from a strong sociological base, focus is on the "micro context" in terms of managers and their actions in interaction with other individuals within the firm, and on the "macro environment" of different societal institutions. While aiming to integrate the bifurcation between intra-organizational activity and extra-organizational aggregation (Whittington, 2006), the inherent assumption in discussions of STs has remained somewhat deterministic in nature and tended to connote one-sided managerial control. Strategic action is seen as taken by managers inside the boundaries of the single firm and any "outside" influence comprises an aggregated system of actors on a societal level. This contrasts with the INA, wherein a firm's strategy is shaped according to those with whom

there is a business exchange (Håkansson and Snehota, 1989). As Gadde et al. (2003) states, strategizing implies that companies need a strategic orientation where resources, activities and actors are considered simultaneously at the business-network level. This determines the firm's "network position" (Håkansson and Snehota, 1989), which shapes its potential to influence others. Strategic action has been used to refer to efforts by actors to influence (change or preserve) their position(s) in network(s) (Johanson and Mattsson, 1992). The firm's possibility of acting strategically is thus framed by "its portfolio of relationships and the activity links, resource ties and actor bonds that arise from them" (Ford et al., 1998 p. 49). This suggests that an understanding of the firm's attempts to act strategically must start from the relationship level, i.e. from how it is connected and relates to relevant others through links, ties and bonds.

Therefore, to understand the use of STs from an interactive interpretation, we investigate some traditional techniques used by managers to influence others within the context of business relationships. Specifically, we investigate how the mainstream strategic management concept of STs can be reinterpreted from the INA perspective by considering how such tools are used to influence the substance of relationships and, in turn, how firms engage in strategic action via such tools. The two research questions addressed are: (i) how are STs used to affect the layers of substance of business relationships? and (ii) what role do STs have for the firm's strategic action?

The paper is organized as follows. Section 2 outlines how STs may be understood when strategy is conceptualized as an interactive phenomenon, with focus on how STs may affect resource ties, activity links and actor bonds. Section 3 describes how we approached the study. Section 4 presents three complementary cases comprising three examples of the use of STs in a relationship context. Section 5 analyzes this empirical material to pinpoint what we consider interactive effects between STs and the substance of relationships. Section 6 provides suggestions for further research and managerial implications when STs are subject to an interactive interpretation.

2. Strategy as an interactive phenomenon and the role of STs

A main finding of the first industrial network studies is that firms often engage in close and long-term relationships with a set of important suppliers and customers (Håkansson, 1982; Ford et al., 1998, 2003). These relationships have a "substance" (Håkansson and Snehota, 1995) that goes well beyond the assumptions of traditional economic thinking; these are not "arm's-length" relationships that can be easily traded off for others, but often contain "heavy" physical and organizational adaptations entwining the individual firms (Håkansson and Waluszewski, 2002). Such relationships stem from interdependencies of firms' resources and activities, and develop through interaction processes in which patterns of mutual investments form over time "that link the resources and activities of one party to those of another" (Håkansson and Snehota, 1989, p. 190). To capture how the concept of STs can be reinterpreted from the INA, we first review industrial network theory focusing on the strategic action in each relationship layer.

2.1 The substance of relationships and strategic action

INA considers firms as operating in a business landscape characterized by interdependency and interaction processes. Business relationships enable these interaction processes to occur (Dubois and Håkansson, 2002); while relationships are a means to deal with firm interdependency, they can also increase interdependence as adaptations occur between the parties. Business relationships are interconnected (Håkansson and Snehota, 1995), as they can hold important functions to other directly or indirectly related relationships of the respective parties. The Actor-Resource-Activity (ARA) model (Håkansson and Johanson, 1992) captures both the substance and interrelatedness of business relationships through three layers: actors, resources and activities.

As business relationships are the means to interact, they are resources in themselves, and through them, other resources (material and immaterial) can be tied together across firm boundaries to create new resource combinations. Business relationships can also be used to link activities of two or several parties to increase overall efficiency. Finally, over time, relationships create bonds between actors regarding social attitudes and orientation towards each other. Thus, established business relationships directly connect aspects of the firm's internal environment to specific business counterparts, so that, compared to traditional economic thinking, the boundary between the internal and the external environment of the firm is blurred. Or, as argued by Araujo et al. (2003), while the conventional view focuses on the boundaries of the firm as barriers towards others, an interactive perspective pays attention to their bridging function and the interactive processes of relating to and negotiating with others. Thus, "the drawing of boundaries is an interactive and negotiated process mediating a variety of internal and external relationships and involves more than establishing a difference between the inside and outside of the firm" (Araujo et al., 2003, p. 1257).

How the individual firm is seen not only as related to specific counterparts in this direct way but also embedded in a network of interrelated business relationships impacts how it is assumed to engage in strategic action (Johanson and Mattsson, 1992). As stated above, strategic action refers to actors' efforts to influence their position(s) in network(s) (Johanson and Mattsson, 1992). Rather than placing the focal firm at the center, INA is based on the business relationships that influence the firm and through which the firm can influence others. Gadde et al. (2003) state that the firm's strategic orientation consequently needs to be applied in the three substance layers of business relationships; thus, the following section discusses the strategic implications of resources, activities and actors.

2.1.1 Strategic action in the resource layer

A number of empirical studies within different industries (e.g., forestry, pharmaceutical, fishing, construction) show that firms are characterized by interdependencies due to the resources they need to acquire from others. It has also been shown how the features and value of resources change depending on which other resources they are combined with (Holmen, 2002; Håkansson and Waluszewski, 2002; Penrose 1959). Thus, firms rely on relationships with specific counterparts to access essential resources. Furthermore, depending on how the resources can be or are combined, they represent a particular use or value to the respective counterparts.

This heterogeneous character of resources has specific consequences for their strategic importance. Firstly, it makes business relationships the firm's most important strategic resource in that it is the means through which interaction occurs and other resources can be accessed, combined and adapted (Gadde et al., 2003; Håkansson and Ford, 2002). Secondly, it impacts how *others* can create value from the resource combinations that can be made. Handling resources strategically is thus about identifying and striving for the *mutual* value that can be obtained by using and combining them in new ways across firm boundaries (Gadde et al., 2003). Thirdly, as resources become valuable through interaction and adaptation processes within business relationships, they are also outside the full control of the individual firm (Gadde et al., 2003). The way that firms combine resources (i.e. form resource ties to specific counterparts) must thus be considered from a strategic viewpoint in terms of which counterparts to prioritize and the level of investment made in relation to those counterparts (Gadde et al., 2003; Håkansson and Ford, 2002).

2.1.2 Strategic action in the activity layer

Through exchange processes of products and services, interaction provides opportunities for the firm and its individual counterparts to relate other essential activities (e.g., production, logistics) to each other to increase efficiency. Studies show how activities are linked across firm boundaries to increase overall efficiency and to achieve learning among counterparts (Jahre et al., 2006). Thus, interaction with others can be regarded as the most fundamental firm activity (Gadde at al., 2003); it allows the firm to relate specific resources and activities to specific counterparts from which the outcome can be new resource combinations and activity links that increase efficiency and present learning opportunities.

From a strategic viewpoint, while engaging in close relationships through mutually adapted resources and linked activities means that firms can influence counterparts directly, it also entails that the firms themselves will become directly or indirectly influenced by their counterparts (Håkansson and Ford, 2002). The strategy process thus involves not just the firm's "own" resources and activities, but relates to a larger resource constellation and activity pattern involving several counterparts. Due to this direct influence that others have on the firm and that the firm can have on others, as stated by Gadde et al. (2003, p. 395) "it is crucial for a company to build interdependencies systematically" (see also Dubois, 1998). To do this, the firm is dependent upon others; thus, strategic action involves trying to influence the activities of important counterparts and mobilize them to build interdependencies in a systematic way (Gadde et al., 2003).

2.1.3 Strategic action in the actor layer

Some actions cannot be explained from the resource and activity layers alone. As an actor, the firm depends on the actions and behaviors of others, but can also purposefully try to influence these others. It can thus influence its network position, which Håkansson and Snehota (1989) use to state the relational aspect of strategic positioning. They argue that positioning is relational as it is directly connected to exchange processes between the firm and its counterparts, and the outcome of this process will always be determined by what the parties can achieve through this exchange—i.e. the performance of the objects exchanged. This

performance is in turn determined by the specific value the parties can extract from the exchanged objects by combining them with other resources and activities.

Therefore, the firm's position is related to the value that *others* can achieve through exchange processes with it, which are "individual and subjective" (Håkansson and Snehota, (1989, p. 195). The importance of actors' subjective view of the surrounding network to understand networking actions and outcomes is also inherent in Ford et al.'s (2003) model of managing networks. As such, the position is not only "determined" by how the firm as an actor perceives its own position and how it acts accordingly, but also how the exchanging parties perceive the firm and how this perception is translated into actions and behaviors towards the firm. "Network picturing" describes how managers relate perceptions about their business network to decision-making and strategizing activities (Abrahamsen et al., 2016). A strategic issue thus becomes finding an alignment between the perceptions and behaviors of others with the firm's own perception and sense of direction (Håkansson and Ford, 2002). Or, as expressed by Gadde et al. (2003, p. 361), "The key factor for successful implementation is how the strategy of the individual firm relates to the ambitions and activities of those relevant others."

To develop the idea that STs can be viewed in terms of how firms operate within business relationships, the following will consider the interpretation of STs within SaP studies. Here, there has been considerable research momentum in generating the most state-of-the-art thinking on STs.

2.2 The SaP interpretation of STs

SaP studies use multiple interpretations of the practice lens (Rouleau, 2013), but is generally presented as a perspective within the broader field of strategic management that considers strategy not as something that a firm has but rather as something that people do (Golsorkhi et al., 2010). One thrust is to take seriously the work and tools of practitioners themselves to better understand strategizing. Therefore, one focus in SaP studies is on the "stuff" that practitioners use on a day-to-day basis in the work of strategizing (Whittington, 2006; Whittington et al., 2006). SaP studies consider STs as a subset of strategy *practices*, which refer to shared routines of behavior, including traditions, norms and procedures for thinking, acting and using "things" on a day-to-day basis (Whittington, 2006). Thus, the distinction between tools and practices blurs. Nevertheless, SaP scholars argue that researching STs is a practical endeavor (Whittington, 2003) because STs are visible, explicit and observable.

2.2.1 STs in broader terms

SaP studies regard STs in broad terms as being useful. By focusing on the outcomes of using tools (Jarzabkowski and Kaplan, 2014; Whittington, 2006), SaP studies attempt to remove STs from the imagery of instrumental use and managerial control in three ways. Firstly, STs are conceptualized as "symbolic resources" that create spaces for debate and dialogue (Kaplan and Jarzabkowski, 2006). Specifically, SaP authors conceptualize STs as a means to bring actors with different viewpoints and interests together so that strategic choices can be made. Secondly, STs are conceptualized as "strategy toys" that are used to facilitate creative strategy work. Stenfors (2007) highlights a shortage of strategy toys and states that the serious play (and routine use) of strategy toys facilitates discovery, innovation, flexibility, experimentation,

risk taking, variety and search. SaP therefore recommends that research on STs should consider the exploratory use of STs, and not their prescribed use. One example is the SWOT analysis being used as an "ice breaker" rather than to conduct analysis or solve problems, as the results of SWOT analyses often do not filter into subsequent strategic discussion (Hill and Westbrook, 1997). Finally, STs are seen as "artifacts," structuring information and providing grounds for interaction around a common tool that is easily recognizable by participants in a strategy task (Jarzabkowski and Wilson, 2006). This is because users prefer tools that are transparent, well-known and simple to use, rather than based on sophisticated mathematical functions. Furthermore, as artifacts, STs can be conceptualized as "boundary objects" attributed with meanings and actions that enable and constrain knowledge sharing across boundaries (Spee and Jarzabkowski, 2009).

In sum, SaP studies have broadened interpretation of STs from an instrumental to a more experimental angle, interpreting STs as symbolic resources, strategy toys and artifacts (Jarzabkowski and Wilson, 2006; Kaplan and Jarzabkowski, 2006; Stenfors, 2007). Within SaP studies, following the general strategy literature's tendency to differentiate between the inside and outside of the firm, the boundaries refer to intra-organizational barriers, and how STs enable or constrain interaction beyond intra-organizational boundaries remains on the SaP research agenda (Jarzabkowski and Spee, 2009). Nevertheless, this opening up helps to explain why STs may be used differently in different contexts, and why simple and flexible tools are valued by practitioners. It also serves as a useful departure point to consider use of STs in an interactive perspective, which emphasizes boundaries as bridging functions and the interactive processes of relating to and negotiating with others.

2.2.2 Viewing STs from INA: Two incongruent areas with SaP

There are at least two incongruent areas in placing an interactive lens on STs, in contrast with the concept's treatment in SaP studies. One area is the level of embeddedness. SaP takes a broad sociological perspective that considers strategy as a broad field of social activity whose practices are important to society as a whole (Whittington, 2004; Whittington, 2011). The SaP context entails a systemic perspective of strategy (Whittington, 2001), where the objectives and practices of strategy depend on the particular social system in which strategy-making takes place. Contrastingly, in the INA, the firm is embedded in relationships with identifiable counterparts and strategizing is understood from the perspective of the individual and interconnected relationships (Johanson and Mattsson, 1992; Håkansson and Ford, 2002; Gadde et al., 2003).

The second area is the interpretation of (extra-organizational) actors. In SaP studies, the interpretation of strategists has begun recognizing not only senior executives but also middle managers (Balogun, 2003), and extending to more peripheral managers (Regnér, 2003). SaP interprets extra-organizational actors as including management consultants, business schools, financial institutions, business media, state institutions and pressure groups (Whittington et al., 2003; Clark, 2004). In contrast, actors in the INA are in some way part of exchange processes in direct or indirect contact with the individual firm, which highlights the significance of relationships. If we insist on using the term "strategists," then "anyone who can affect the long-term development of an important business relationship is potentially a strategist" (Baraldi et al., 2007, p. 892). Under an interactive lens, there are more classes of

actors in an industrial system where business relationships and networks are of strategic relevance, and strategists are no longer faceless when exchange processes are considered.

2.3 Placing an interactive lens on STs

What happens when we use an interactive perspective of the ideas, methods and elements that the mainstream strategic management denote as STs? Researchers highlight a common misconception that the industrial network approach to strategy is equivalent to strategy making as a submissive process with the purpose of surrendering to the will of others (Bizzi and Langley, 2012; Wilkinson and Young, 2002; Öberg et al., 2016). Admittedly, strategizing is a cumbersome task due to the parallel activities of other actors (Baraldi et al., 2007), and an integral part of strategizing is flexibility and responsiveness to other parties (Axelsson and Easton, 1992). However, while strategizing is interactive and contingent on the actions and reactions of others, the industrial network approach posits that "the individual firm still needs to act, to try to control…and influence, to suggest ideas and initiatives, to set limits and to seek opportunities" (Harrison et al., 2010, p. 948).

Applying an interactive lens to STs, we can further draw on the notion of strategic action (Johanson and Mattsson, 1992), which has been interpreted as purposefully challenging others and creating change in the network. However, such action must be aligned with the resources and activities of others to have any desirable effect, as neither the firm nor its strategy works in isolation. This also relates to the degree of influence or control the firm has over its business relationships. While increased control can reduce risk, it can also decrease the dynamics of others, which can negatively impact the ability to change and innovate (Håkansson and Ford, 2002). The ways the firm relates to and interacts with its counterparts are thus essential managerial actions, and "listening, reflecting and reacting to others become central activities" (Håkansson and Ford, 2002, p. 136). We suggest that STs can be viewed in terms of how they are embedded in a series of acts and counteracts. Furthermore, STs in an interactive sense can, for instance, encompass how managers prepare for the next encounter with important business counterparts on a day-to-day basis, how meetings are set up with important customers and suppliers, or how plans are discussed with, developed with and communicated to these important counterparts.

As outlined above, from the INA, strategizing involves other actors and needs to contribute to the *mutual* value created in the exchange processes with these individual actors (Johanson and Mattsson, 1992; Gadde et al., 2003; Håkansson et al., 2009). Thus, business relationships are viewed as the firm's main strategic resources and interaction is an essential strategic activity (Ford et al., 2010; Ford and Håkansson, 2006). This standpoint implies that the boundaries between the firm's internal and external environment are blurred compared to traditional economic thinking, from which conventional views of STs stem. Rather than atomistic and separate units of clearly defined internal and external resources and activities, firms are viewed as highly interconnected through the resources and activities they combine and mutually develop across firm boundaries (Håkansson and Waluszewski, 2002). Acting as "bridges," business relationships enable firms to relate to others and gain access to other crucial resources and activities. Because interaction is central within this business landscape, the assumptions posited by mainstream ST thinking, despite being extended by SaP, become

problematic, and we believe there are important insights to be gained by re-thinking the role of STs from an interactive perspective. This is where our two research questions come in.

3. Methodology

To capture and analyze the interactive effects of ST use, this study uses multiple cases. Three focal firms in the construction and oil and gas (O&G) industries in Norway—ConstructionCo, LiftCo and ContractorCo—were chosen to allow for variation in both industry context and relationship types, and to enable analysis of important and complex relationships.

ConstructionCo is a family-owned business with stakes in advanced offshore engineering, infrastructure and construction. Its main customers are public entities such as the county authority and road authority, as well as builders of residential homes. Our empirical example is located within the subdivision of civil construction specializing in building residential homes, and constructing public infrastructure (e.g., highways, bridges and municipality schools and hospitals). LiftCo is a Norwegian subsidiary of a worldwide leader in the design, manufacture and sale of equipment and components used in O&G drilling and production. LiftCo is an internationally acknowledged supplier of innovative, high-technology solutions. Our example is located in the sub-segment of this Norwegian subsidiary responsible for manufacturing and assembling components of lifting and handling systems, including cranes and winch systems for offshore construction, drilling and production. ContractorCo is a global provider of products, systems and services to the O&G industry that has evolved from its origins in shipbuilding and manufacturing components for machinery and equipment in Norway. Its main customers are international, national and independent O&G companies around the globe. Our example is located within the business area (BA) responsible for maintenance, modifications and operations services and solutions for extending the life of O&G fields.

Using the industrial network approach, the unit of analysis for the collection and processing of empirical material is the firm's business relationships. In analyzing how STs are used to affect business relationships, the ARA model is implemented to trace effects in specific resource ties, activity links and actor bonds. Furthermore, from the standpoint of the focal firm, both the supplier and customer perspectives are sought in order to investigate a variety of ST use. The study can be considered abductive (Dubois and Gadde, 2002, 2014; Dubois and Gibbert, 2010), as the cases consider ST use as a sensitizing concept when entering the empirical world (Blumer, 1954). Additionally, we use an iterative process of revisiting the empirical material while reviewing the INA literature on strategizing. The empirical material is then analyzed using an interactive interpretation to trace effects in ties, links and bonds. Below, we explain our choice of cases, sources of data and how the empirical material was interpreted.

3.1 Choice of cases

In reality, important relationships between firms tend to be complex and vary in their substance depending on the existence, type and strength of resource ties, activity links and actor bonds (Håkansson and Snehota, 1995). Instead of presenting detailed case studies of the three focal firms, we present three empirical examples of tool use in each dimension of the relationship (ties, links and bonds, respectively).

Each specific tool is identified to analyze how it is used to affect selected relationship dimension(s). The relationship layers are described as separate elements and are central to each example of tool use. However, this is a simplification because the layers are tightly related and function in parallel to one another. As per Ragin (1992), the process of "casing" goes from company level, to relationship level and then to relationship dimension level. Thus, the cases function as an intermediate and temporary product.

3.2 Data sources

This study is based on in-depth interviews and document studies of three focal firms. In the research design, the selected informants had at least a working, if not extensive, knowledge of the most important business relationships. Using semi-structured interviews (Kvale and Brinkmann, 2009), the interview questions were designed to pinpoint possible aspects of using tools in a network context. Firstly, questions were crafted to direct informants to talk about their three top business relationships and how these counterparts are involved in the firm's strategizing. Secondly, another set of questions led participants to talk about which tools are involved in the firm's thinking about the counterparts and what the firm is doing in its relationships to the counterparts. The interviews thus reflected the informants' view of tools pertaining to the most important business relationships.

Thirteen semi-structured interviews were conducted between February and May 2013 with eight informants (see Appendix). The interviews averaged 90 minutes, beginning with the informants replying to the prepared questions and leading to more open discussion. All interviews were recorded. In several cases, the same informant was interviewed more than once. In order to analyze the transcript focusing on meaning (Kvale and Brinkmann, 2009), each interview was transcribed verbatim.

Alongside the interviews, publicly available reports on both the firm and the industry, including articles in the business press, newspapers, press releases, and information from other types of organization, such as INTSOK (Norwegian O&G Partners) and the Federation of Norwegian Construction Industries, were consulted. Most interviews were scheduled as part of a company visit in its domiciled city, which included a walkthrough in the relevant departments. This enabled a first-hand view of certain physical tools, such as databases and documents, and a better understanding of products and facilities mentioned by the informants.

3.3 Interpretation of empirical material

Data analysis progressed with the transcribing, coding, categorization and condensation of the interview text and writing of case summaries in a non-linear way. In our empirical material, tools and relationships are deeply entwined. In every relationship, a variety of STs are embedded that are used to systematically relate to others. At first glance, tools range from being conceptual (customer portfolio thinking), process-related (process templates, supplier scorecards), physical systems (in-house supplier databases or sales management systems) or extending to practices such as supplier days and conferences. Such a heterogeneous collection of tools does not readily lend itself to being organized.

Given our study focus, we selected three tools from the empirical material for further scrutiny using the three dimensions of the business relationship. These tools are framework

agreements, conferences and supplier scorecards in the most important relationships in ConstructionCo, LiftCo and ContractorCo, respectively.

The next section focuses on the three layers of business relationships outlined in the theoretical section. First, two different business relationships are used to describe the use and non-use of framework agreements as a tool. Here, we deemed the resource dimension as most useful to exemplify the interactive use of tools. Second, both a direct and an indirect customer relationship are used to illustrate how tools can influence the indirect party. In this case, the activity dimension illustrates tool use in networking. Third, the development of one specific business relationship shows the interactive effects of tool use. Here, the actor dimension was clearly the most prominent in terms of renewing social bonds in the relationship.

4. Three cases of ST use by substance of relationships

4.1 The resource layer: Framework agreements in the ConstructionCo–ConcreteCo relationship

4.1.1 Background, strategic issues and challenges

According to the department procurement manager (DPM), ConstructionCo's strategic initiative entails increasing consulting engineering services in order to relocate fabrication to countries with lower labor costs. Therefore, ConstructionCo aims to internationalize its sourcing to reduce costs, but not quite to the old motto of "best price wins." This is because ConstructionCo also describes itself as newly transitioning into this higher awareness about strategic supplier thinking. Undergoing such a fast-paced transition to work with international suppliers rather than just Norwegian suppliers is challenging for ConstructionCo. A dedicated position, international procurement manager (IPM), has been created to oversee international business relationships, but at least three challenges remain. Firstly, not only does ConstructionCo operate within a project-based environment that is typical for construction firms, but it also practices a dual reporting structure, such that each purchaser is accountable to the procurement department and to the incumbent project manager. This setup makes it challenging for the procurement department to obtain an overview of its most important business relationships, especially international ones. Secondly, the nature of buying (from planning and tenders to contracts, post contract, and installation) in the construction industry is typically a long, drawn-out process subject to much handing-off from one function to another (e.g., purchaser to project manager, site manager, finance and billing). Important suppliers have various experiences due to the long process within the business relationship, which is compounded by the dual reporting structure. Thirdly, the idiosyncrasies of the Norwegian construction industry, where planning and building happen in parallel rather than consecutively, makes it practically difficult for the IPM to consolidate volume (from the projects) when going out into the market. This aspect entails a particular challenge for ConstructionCo to handle up-and-coming international suppliers.

4.1.2 ConstructionCo's two most important relationships (supplier perspective)

ConcreteCo is an international producer and deliverer of cement products. It is one of ConstructionCo's most important suppliers because the rate of concrete hardening impacts the construction process, making delivery time-critical and proximity to construction sites crucial due to Norway's harsh climate conditions, mountainous geographical relief and often widely

spaced settlements. ConcreteCo has become ConstructionCo's preferred supplier for most projects due to its geographic penetration of ready-mix concrete plants in Norway and ability to produce products at the specified chemical composition. ConstructionCo–ConcreteCo interaction occurs at many corporate levels and functions (from engineering to finance) beyond the procurement department at any one time. ConcreteCo actors actively initiate ongoing meetings with ConstructionCo in order to know "how ConstructionCo plans to do things in the future and if [ConcreteCo] are a part of them." ConcreteCo actors always want to know how ConstructionCo thinks in terms of selecting and involving ConcreteCo. One example is that should ConcreteCo not be selected for a ConstructionCo project, the news is disseminated almost instantaneously within ConcreteCo and follow-up ensues immediately by an appropriate ConcreteCo actor with an individual in ConstructionCo to identify what ConcreteCo could do to put the situation right.

4.1.3 Role of framework agreement in the ConstructionCo-ConcreteCo relationship Although ConstructionCo states it is a newly internationalizing firm, the project culture is still deeply entrenched in using local suppliers rather than international ones. Therefore, there is tension in balancing the use of local versus international suppliers, even with the formalized role of IPM. ConstructionCo's relationship with ConcreteCo is subject to many internal challenges regarding coordination between its purchasing department and the project teams themselves, especially in using an international supplier such as ConcreteCo. The strong project culture operating as independent silos in ConstructionCo means that decision-making authority concerning ConcreteCo resides at project level in a decentralized manner, where the IPM has little overview of how ConcreteCo can fulfill upcoming needs. Both the relationship atmosphere and interaction processes mean that the project teams do not systematically accord ConcreteCo its hard-earned preferred-supplier status. Ongoing ConstructionCo-ConcreteCo interaction involves constantly disassembling into a multi-project interaction environment wherein it is "difficult for the big ship to sail in one direction." To nurture the necessary routines and communication channels, ConstructionCo has created a framework agreement tool.

Framework agreement is a common term and generic tool to formalize prices, delivery times and scope of responsibility among the more important suppliers in a procurement department. It is also used to formally designate preferred-supplier status. However, ConcreteCo's framework agreement is also described to contain clauses to "tie the supplier more closely" with ConstructionCo to "use their expertise in that field." Or, according to the IPM, to "access free tips and tricks" from ConcreteCo, who are considered "professional in their field." Two or three times a year, ConcreteCo is obligated to hold meetings with ConstructionCo to not only share product knowledge but also be updated on market movements regarding important actors. The additional clauses in the framework agreement are important to ConstructionCo, who acknowledge that they are only "starting to get international muscles."

4.1.4 Contrasting with the ConstructionCo–PlumbCo relationship

PlumbCo is an important supplier to ConstructionCo. PlumbCo is handled very differently in terms of tools from ConstructionCo's perspective. PlumbCo is a local supplier of plumbing

and engineering services with a long history of operation in Norway. ConstructionCo describes itself to be closest to and prefer this Norwegian supplier due to their long history of successful cooperation. It is understood within ConstructionCo's internal units and project teams that PlumbCo is preferred for all ConstructionCo's plumbing and engineering services in all its projects. Because plumbing plans and scope of work entail "many interfaces with the other sub-contractors" with "a lot of heavy engineering," ConstructionCo and PlumbCo work together to plan complex systems (e.g., channels and pipes, air and water, radiators, electrical), drawing on one another's knowledge and coping with ever-changing standards such as energy demands. ConstructionCo has always involved PlumbCo when drawing together other actors (e.g., architects and engineers) to find the best concepts. The DPM's stated, "over the years, we have found a team that solves this in a good way. PlumbCo...has always been with us."

ConstructionCo and PlumbCo enjoy good relations across all levels in the corporate hierarchy at both firms. The DPM highlighted that because they have a long-lasting and complex content relationship, no legal instruments are necessary. Rather, the interaction is based on a "mindset of collaboration and honesty," where ConstructionCo and PlumbCo "are not trying to benefit from each other so the other party loses."

The DPM also emphasized that the relationship is very transparent. To avoid overwhelming PlumbCo, ConstructionCo has to balance volumes among several suppliers and this is always openly discussed and agreed upon with PlumbCo. Thus, the business relationship involves trying "to work together towards the customer, and in many ways share the risk towards the end customer." The relationship with PlumbCo is long term, and legal instruments have never been important. In the words of the DPM, "we don't have this kind of talk with them about planning for the future...as long as ConstructionCo has the same people we have today, and PlumbCo has the same, the relationship will stand and develop...it is not formalized in any way."

4.2 The activity layer: How conferences are used in the LiftCo–DrillCo relationship 4.2.1 Background, strategic issues and challenges

LiftCo operates within the offshore O&G industry, which according to the area manager for business development (AMBD) is often characterized as cyclical, where new builds and contracts on new rigs depend on oil prices. Such cycles consequently allow for different players in the market at different points in time. Previously, there was more competition among smaller shipyards building drill rigs. However, due to favorable oil prices (at the time of the interviews), the prevailing trend was shifting towards building drill ships in fleets instead of individually customized vessels, as established operators perceive that they are the ones who will operate the drill ships for the next 20 years. At the time of the interviews, there was a lot of scaling up with the consolidation of mega shipyards around the world to meet the demand of these experienced players who appreciate technology and quality, and specialized vessels.

4.2.2 LiftCo's most important customer

ShipyardCo is one of LiftCo's most important customers according to its accounting books. ShipyardCo, headquartered in East Asia, is a worldwide leader in the building of drill ships and platforms. Bigger shipyards have been increasingly important to firms like LiftCo

because they "can get their engine going" and "there are a lot of optimizing things to come," according to the AMBD. It has become strategic and important for LiftCo to transition orientation from smaller shipyards to mega shipyards, and to deliver and execute on a larger scale (building a fleet of drill ships rather a single order) than before.

However, according to the AMBD, the most important customer is a more indirect one: DrillCo. DrillCo owns and operates an advanced and diversified fleet of harsh-environment jack-up rigs, deepwater semi-submersible rigs and ultra deepwater drillships. Considered one of the most experienced operators, it supports global O&G production by providing high-efficiency drilling services to oil companies around the world. DrillCo is technology driven and strives to be an early adopter of technology. DrillCo is indirectly connected to LiftCo through ShipyardCo.

LiftCo differentiates between the customer who pays and the customer who is deciding what to buy. LiftCo sees that it is DrillCo, its indirect customer, with whom it needs to actively engage and communicate. As stated by the AMBD, "the customer that is paying is actually not the one that we need to influence the most." Even though ShipyardCo is LiftCo's direct customer, it is actually DrillCo that drives its sales.

To LiftCo, the biggest customer on its books (ShipyardCo) does not correlate with the most intense and highest level of interaction (DrillCo). The AMBD described that LiftCo has more interaction with DrillCo than with ShipyardCo: "it is not enough just to talk to the direct customer, we need to be stimulating the market for the users of the product, it is a symbiosis." In fact, the director of business development (DBD) revealed that the aim is to use the shipyard as an intermediary and, when necessary, to "disconnect the shipyard" to reduce lines of communication.

4.2.3 Role of conferences in the LiftCo–DrillCo relationship

With its diversified portfolio of rig types, DrillCo is viewed as *the* technology partner of LiftCo. Alongside actively envisioning DrillCo as a major counterpart to maximize its learning potential because "it is driving technology, driving the performance, driving the safety of the equipment," the AMBD emphasized actively pursuing more arenas to increase interaction with DrillCo. One step is active enrollment in relevant professional organizations (e.g. the Society of Petroleum Engineers and International Association of Drilling Contractors) to try to be visible in the market.

According to the AMBD, the tool in use is systematic planning towards relevant conferences, which is used to create arenas for interaction with DrillCo. This calls for more than taking an active role in preparing for conferences and working in tactical sections, with the aim of envisioning how the industry will evolve and what kind of capability is expected in the future. It is helpful to be perceived as actively putting out new technology in the market by disseminating papers to explain the technology's workings and lessons learned. LiftCo describes the use of conferences in relation to systematic planning, in that a plan is being put in place (strategically set up from the top of corporate business) such that everyone in LiftCo knows the important conferences for the year to engage this important business counterpart. Such systematic planning of conferences is part of the annual plan, and synchronized with the sponsorship budget by LiftCo. By presenting papers and talking to presenters from DrillCo, the conference is an important arena of interaction with DrillCo. As the AMBD related, joint

presentations are sometimes also possible, and even developing joint written publications for industry dissemination. Aptly, the AMBD described conferences "as a sort of playground, where ideas and opportunities are grown" with DrillCo.

4.2.4 Role of conferences extends to LiftCo-ShipyardCo relationship

Using conferences as an interactive arena also impacts the LiftCo–ShipyardCo relationship, complementing the use of various formal means to handle the relationship. LiftCo needs to give ShipyardCo confidence that LiftCo's equipment will fit the vessels that ShipyardCo provides to DrillCo. Conversely, DrillCo needs to be influenced to organize future dialogues with ShipyardCo in favor of LiftCo.

LiftCo relies on regular meetings with ShipyardCo driven by each project within the relationship to meet delivery schedules and coordinate capacity. Additionally, LiftCo keeps data about ShipyardCo in its internal databases that attempt to quantify interaction in the key customer relationship. One database is known internally as the "sales vault," and is essentially an internal Web-based database for firm-wide customer intelligence work in order to understand "what did the customer want, what did they buy, and what did they pay." It is also a channel to product experts who are decentralized within LiftCo and its mother company. Another form is dedicated engineering databases. Known internally as the "experience database" in LiftCo, this serves to do "a lot in detecting or getting information about how LiftCo does business with ShipyardCo, and what are the challenges, if [any], and what do you need to remember the next time." Yet another is its in-house sales development tool, which is the main intra-organizational route for handling important customer relationships to track all leads and generate bill plans and customer reports. It is part of standard operating procedures for all employees working in the sales and business development areas to use it. However, these tools would not be sufficient to meet the demands of interaction with DrillCo and ShipyardCo simultaneously.

4.3 The actor layer: How supplier scorecards are used in the ContractorCo-PipesCo relationship

4.3.1 Background, strategic issues and challenges

ContractorCo's ambition is to remain a preferred supplier to the oil majors, with a reputation for being reliable but costly. High quality and safety standards have become part of its corporate mantra in the aftermath of the 2010 Gulf of Mexico oil spill, and this remains a challenging area as it works with many sub-suppliers to secure its flexible cost base. In handling its important suppliers, ContractorCo relies heavily on its in-house supplier information system. As the vice president of strategic sourcing (VPSS) put it, "many employees are involved in supply chain activities and supplier development activities but they don't necessarily reflect that is what they are doing." Having a relatively efficient information system is helpful, but can also undermine efforts to maintain rich interactions with ContractorCo's sub-suppliers.

The evolution of a highly robust and sophisticated in-house supplier information system was shaped as ContractorCo operates in an organizational setup comprising very strong and independent projects. A challenge is that no one in this setup has a full overview of ContractorCo's most important supplier relationships. The language used to manage key

suppliers relies on their type of contractual mode (framework agreements or enterprise type contract, or parallel frame agreements) in ContractorCo. As a kind of shorthand, these contractor modes refer to, respectively, a supplier who (1) is of high priority and should always be used, (2) takes on more responsibilities and is integrated in the project teams, or (3) is subject to competition regarding price and delivery time from project to project. Due to the persistent challenge in gathering timely and comprehensive feedback of supplier experiences, ContractorCo has prioritized resources to develop an in-house supplier information system (operational one year before the interviews were conducted).

Within this system, there is a supplier performance evaluation module and a supplier scorecard is provided by gathering six criteria of information for each important supplier. These criteria are considered appropriate for supplier development and evaluation, while avoiding excessive detail. For ContractorCo, supplier scorecards are described as a more reliable way to "get some signals" on how collaboration with the most important suppliers has proceeded during the project period. The scorecard is accompanied by trend curves for each supplier, encompassing both positive and negative trends. The VPSS described the system as being viewed favorably in the organization (and even by its important customers) and heavily relied upon as an internal communication tool. Specifically, the trend curves were described as useful for analyzing suppliers before supplier meetings to understand where the suppliers need to improve. Furthermore, such analysis is used to disqualify suppliers if they are underperforming, do not show willingness, or are perceived as unable to improve.

4.3.2 PipesCo: One of ContractorCo's most important suppliers and a relationship in transition

Considered one of ContractorCo's most important suppliers, PipesCo is one of the world's leading distributors of piping materials and valves, in close collaboration with its sister companies and manufacturing partners. ContractorCo, being a major O&G contractor, where the volume of piping, pumps, valves, separators and tanks used is significant, uses PipesCo extensively across all of its BAs. Besides being lauded as a piping specialist with the most extensive stock of standard and non-standard products, and flexible with urgent deliveries, PipesCo understands the harsh Norwegian climate, as well as safety standards. Therefore, PipesCo has become one of ContractorCo's most important and high-volume suppliers. ContractorCo–PipesCo interaction occurs at many levels and functions and involves not just the case study BA, but also other BAs with ContractorCo.

Previously, ContractorCo dealt mainly with PipesCo due to their knowledge of North Sea climate conditions and stringent safety requirements. However, this is fast changing as many international players have caught up with this knowledge, introducing a fresh element of competition that was virtually non-existent before.

Therefore, unlike the previous decade, where PipesCo would undisputedly be ContractorCo's most important supplier, ContractorCo's relationship with PipesCo has been undergoing drastic transition, with other European and East Asian suppliers constantly seeking to address the product requirements (especially in response to the stringent Norwegian market) and to penetrate the piping market. Thus, the preferred-supplier status of PipesCo is described to be more vulnerable than before.

4.3.3 Role of supplier scorecard in the ContractorCo–PipesCo relationship

The preferred supplier status of PipesCo has undergone a drastic relegation. At the time of the interviews, ContractorCo had emerged from its latest rounds of ongoing supplier reviews (for its most important suppliers). According to the VPSS, ContractorCo wanted to reevaluate its sourcing strategy for piping supplies in order to have one supplier for the domestic market and one for the international market, to ensure that tough Norwegian standards are met. However, the supplier review process led to awarding not two but three parallel agreements: one to PipesCo, one to another major player and a third to a joint venture between one small local supplier and a big international player.

PipesCo was therefore emerging from its lost privileged status as it transitioned to a "parallel frame agreement" with ContractorCo. This agreement covers most standard clauses (e.g., buy-back, storage), except for prices, with PipesCo. This transition implies that PipesCo must adapt its approach to compete on prices and delivery time with other contenders, project to project.

This empirical example of a specific criterion in the supplier scorecard was captured in what was described as an ordinary meeting between ContractorCo and PipesCo. At a selected point in the meeting, in the presence of the entire PipesCo supplier management team, the VPSS logged on to the supplier information system and pulled up its scorecard and trend curves. PipesCo had been unaware that it had been underperforming based on ContractorCo's expectations. Rather than providing ambiguous feedback, the VPSS used the scorecard and trend curves interactively with PipesCo. Both positive and negative trends according to all six criteria (timely delivery of goods and services, quality of goods and services, timely delivery of documentation, quality of documentation, environmental and safety standards, collaboration and responsiveness) were presented to the PipesCo team. As PipesCo's representatives were taking in this visual information, the VPSS encouraged to them to look at their performance evaluation. He stated that they were underperforming, as digitally captured on the supplier information system. The VPSS stated: "I can even show them which projects are getting really bad feedback- the documentation... late, quality of documentation- that is an eye-opener for them!"

5. Analytical discussion

Across the three cases, it is evident that the way conventional management methods and techniques, or STs, are used is directed towards trying to influence important counterparts in specific ways. However, simultaneously, this behavior aims at developing specific resources and activities and facilitate future interaction between actors. Thus, the examples illustrate how the firms use STs to affect existing ties, links and bonds, and develop new ones.

While the three substance layers of relationships are intertwined, for the sake of clarity the discussion of each example focuses on the relationship dimension that the current ST was shown to (or aiming to) affect the most: resource ties, activity links or actor bonds. In the framework agreement example, this was used to mutually gain access to specific knowledge, as discussed through the resource dimension. The conferences example illustrates the process of developing specific activities in relation to new business opportunities, discussed through the activity dimension. Lastly, the example of the scorecard, used for "goal matching" between the focal firm and its supplier, was discussed through the actor dimension. Table 1

summarizes how the selected tools were used in the three substance layers of the business relationships in the three companies. Given the three dimensions' interconnectedness, each tool affects all layers of the relationship, though to varying degrees. We use our empirical material to trace the interactive effects of the respective tools in the relationship dimension that is most apparent. In this section, we analyze ties, links and bonds in the tool use examples in ConstructionCo, LiftCo and ContractorCo, respectively.

(Insert Table 1 around here)

5.1 Use of framework agreements to create resource ties

In ConstructionCo's relationship to PlumbCo, no agreement or tool was necessary. Here, the relationship was based on the same people being involved and their experience of working together. This experience had emerged over time and interaction was characterized by informal agreements. However, as a newly internationalizing firm, ConstructionCo must try to relate to international actors outside Norway. Three interactive effects can be discerned in the use of framework agreements with ConcreteCo.

- (1) Overcome hurdles of communication with internal network. Use of a framework agreement first emerged between ConstructionCo and ConcreteCo to overcome resistance from its strong project teams, who are more accustomed to using local suppliers than international ones, and to reinforce the preferred-supplier status of ConcreteCo. The framework agreement allows the procurement department of ConstructionCo to arbitrate in the inconsistencies of the project teams in using ConcreteCo, such that ConcreteCo should always be able to review its price amidst competing offers.
- (2) Motivate ConcreteCo to share product knowledge. Given ConstructionCo's status as a newly internationalizing firm, the framework agreement unfolded into a catalyst in the ConstructionCo—ConcreteCo relationship to access and develop knowledge regarding how concrete was being used by other actors—in terms of both skills and technology—outside Norway. This knowledge was considered a strategic resource as ConstructionCo was venturing into more international sourcing. The framework agreement thus developed into a way of motivating ConcreteCo to share knowledge on both the product and how others were using concrete production, especially outside Norway. In its ambition to internationalize its supplier base, ConstructionCo needed to learn about the different ways in which concrete is utilized. By drawing upon one of its most important relationships (ConcreteCo) as a channel of learning and embedding this commitment legally via the framework agreement in the relationship, ConstructionCo ensured systematic sharing of such knowledge by ConcreteCo at least twice yearly. Thus, the framework agreement was used to strategically exploit the resources made available in the relationship.
- (3) Act as bridge for ConcreteCo to access ConstructionCo's resources. With ConstructionCo firmly established in Norway with a strong network of local and loyal suppliers, the framework agreement also allows ConcreteCo to potentially gain access to ConstructionCo's resources, including product combinations, and competences in terms of harsh climate conditions for use and delivery of concrete. Thus, ConcreteCo, being a foreign

supplier, gained valuable knowledge in terms of the ways concrete is used by local actors in the Norwegian context.

Taken together, the framework agreement facilitated interaction by enabling the handling and development of important resource ties by negotiating the mutual benefit of enriching each other's knowledge of concrete use within and outside Norway. The way that ConstructionCo and ConcreteCo developed their resource ties also affected their respective network positions, ConstructionCo in the international market and ConcreteCo in the local one. Therefore, through the existing business relationship, the framework agreement functioned as a mutual tool in co-developing the two actors' resources in their respective processes of strategic positioning.

5.2 Use of conferences to develop activity links

Amidst the return to established operators in the O&G industry, LiftCo must try to relate to mega shipyards in Asia, where ShipyardCo has emerged as a major customer, rather than small European shipyards. Additionally, LiftCo must engage in activities linked to building fleets of drill ships, rather than individual ones. The use of conferences arose because LiftCo wanted to actively explore embedding into its current practices different ways to increase interaction with DrillCo. The ways conferences are used to handle and create activity links are threefold.

- (1) Capture and realize efficiency in coordination efforts. As acknowledged by the AMBD, DrillCo is one of LiftCo's most significant partners regarding interaction. DrillCo has become particularly significant to LiftCo in terms of designing complex specifications of lifting equipment in response to activities performed by ShipyardCo in Asia. Instead of catering to one vessel, which was the way of working before established operators returned to favor, the task on hand was to design complex, high-end specifications that will cater to a fleet of vessels. Presenting and putting out new ideas of technological improvements under the umbrella environment of conferences is a way for LiftCo to interact in order to learn (e.g., which technology to prioritize and develop) and to build and increase interdependencies, and capture and realize efficiency in coordination, with DrillCo.
- (2) Broaden activity links in anticipation of new business opportunities. With the transition to alternative methods of extracting O&G, LiftCo must anticipate adaptation of activities (its own and others'). As described by the AMBD, conferences are used "as a sort of playground" where ideas and opportunities are grown. LiftCo is opening up to being influenced by and trying to adapt to new types of activities outside its comfort zone of offshore drilling, including the supply of land rigs and land equipment. Such initiatives cater to very different organizational structures, an area that LiftCo is relatively unfamiliar with. Considered a new business segment where land rigs and equipment are customized very differently, LiftCo needs to gain knowledge about how additional actors perform these specialized operations, as they are usually hired directly by operators such as DrillCo. Synchronizing and matching the development of lifting and handling systems with activities related to land rigs is a way to change its network position to pursue new opportunities. Driven by the need for unconventional O&G, LiftCo needs to broaden its activity links, and is doing so in interaction with DrillCo to guide evolution of its activity patterns. This will enable

LiftCo to maneuver (build interdependencies systematically) into a more favorable network position.

(3) Provide the possibility of another interactive effect: Influence ShipyardCo in the presence of DrillCo. As the DBD disclosed, the yards were used as a partner to pull through larger concepts. In its direct relationship to ShipyardCo, experimenting with conferences was not the priority. Here, the relationship was based on formal mechanisms to manage timelines and coordinate production, using regular meetings and deep databases. However, when considering the indirect relationship to DrillCo, the conference arena allows LiftCo and ShipyardCo to be present simultaneously, extending to one more player which is DrillCo in the "playground" to engage in systematic trial-and-error processes.

Overall, conferences help to create interaction that may not be easily achieved in the relationship otherwise. It may also be possible to extend use of conferences to more than one important actor to the focal firm, as LiftCo has done due to the interconnectedness of relationships.

5.3 Use of supplier scorecards to renew actor bonds

The recent turn of events (supplier review, change of contractual modes) at ContractorCo has inadvertently undermined actor bonds in the ContractorCo–PipesCo relationship, since ContractorCo now has three piping suppliers. PipesCo considers the network position of ContractorCo to have changed as it is now framed by three suppliers instead of just PipesCo. The actor dimension is particularly useful to illustrate how actors elicit cooperation from others. This empirical example is that of ContractorCo attempting to mobilize PipesCo as the possibility to use the supplier scorecard unfolded in interaction between ContractorCo and PipesCo. Three aspects become apparent in this case.

- (1) Match goals mutually. Rather than being a passive scorekeeper for internal communication, the scorecard emerged as a tool to share specific goals. As a tool, the scorecard can be used actively and creatively to influence an important business counterpart towards specific types of goals. Improving the quality of documentation has become a priority in the O&G sector following the 2010 Gulf of Mexico oil spill. Rather than leaving it to chance, the VPSS used the scorecard to influence which type of goals (in this case, quality of documentation) PipesCo should commit to. In highlighting PipesCo's shortfalls in relation to a specific criterion, the scorecard became a tool to match goals between ContractorCo and PipesCo. PipesCo gained an understanding of ContractorCo's expectations (according to its six criteria) for working together. The openness of the VPSS at ContractorCo allowed PipesCo to reflect on and commit to what has become a mutual goal.
- (2) Align perceptions as a concerned and engaged customer to PipesCo. Although not pre-planned, the VPSS moved strategically to confront and motivate PipesCo. Thereby, ContractorCo used the scorecard to "teach" PipesCo. In turn, PipesCo was "learning" as an outcome of the scorecard's application.
- (3) Renew actor bonds amidst recent turn of events in relationship. As ContractorCo and PipesCo take time to adjust their new relationship, this intervention serves to renew the actor bonds between them, where ContractorCo is a concerned and engaged customer who wants to develop PipesCo and is considering PipesCo's interests, and where PipesCo is made explicitly aware that it remains an important supplier to ContractorCo.

This empirical example shows how the scorecard is used to facilitate interaction in the relationship, particularly in renewing bonds connecting the two actors' perceptions and values as ContractorCo transitions to handling three parallel piping suppliers as opposed to one.

6. Concluding remarks

This paper revisited STs from an interactive viewpoint. If a firm is seen as in control of its resources and activities and as shaping its strategy based on how this internal structure can be used to position it against others, the idea that strategic management methods and techniques are practiced "on" others is not strange. Thus, from a mainstream strategic management viewpoint, the concept of STs is unproblematic. However, from an INA perspective, a firm's most important strategic resource is its business relationships; thus, its strategy will largely form in relation to and interaction with relevant others (Gadde et al., 2003; Håkansson and Ford, 2002). Therefore, STs are potentially any "stuff" that can be used to affect the long-term development of an important business relationship. In efforts to broaden the concept of STs, SaP studies have tried to consider a more "interactive" view (Baraldi et al., 2007). Nevertheless, these studies convey the idea that strategic action is shaped mainly within the firm, while any external influence is that of actors impacting general ideas about strategy, rather than those with which there is a business exchange.

Our investigation of how conventional STs are practiced shows how they can be used as tools in terms of affecting business relationships, both existing or developing. However, whether these tools actually present any strategic usefulness, as well as their content and effect, vary in relation to different counterparts and depend on the nature of the business relationship. This is in accordance with earlier assumptions in the industrial network view (Håkansson and Snehota, 1989). Thus, a specific method or technique may only be an ST in the sense that it can be used strategically, in relation to specific others. This depends on whether it can be used to affect the ties, links or bonds of those specific relationships. The use of STs is thus relationship-specific in the sense that whether and *how* they are used depends on the specific relationship. The empirical examples illustrate that STs can be used to mobilize resources, link activities and relate actors in new ways. However, whether they can (or cannot) do so will emerge from the interaction processes with specific counterparts.

In putting the selected STs under further scrutiny using the relationship dimensions, the three examples highlight how STs are embedded within relationships, which comprise ongoing acts and counteracts. It therefore reveals why the unilateral interpretation of strategic action and use of STs as being practiced "on" others is problematic. Through an interactive interpretation, STs must be seen in relation to specific relevant others as they gain particular strategic value only in relation to those. Thus, under an interactive lens, using STs in strategic (co-)action is a way to engage and involve others. This further extends the SaP treatment of STs in considering the firm context and its strategic action.

In interpreting strategizing as an interactive activity, tools can be viewed as being used to handle resource ties, activity links and actor bonds. When tools are considered alongside the relationship substance, they become an integrated part of a networking pattern in order to get desired effects regarding positioning the company in the overall network. We further suggest that STs under an interactive lens can be distinguished as either interaction-facilitating or -creating.

Understanding ST use in an interactive perspective has several interesting implications for research. Specifically, in-depth single-case studies could be developed to investigate ST use from both sides of the relationship, focusing on a particular tool. Here, the IMP toolbox comprising an evolving set of interactive strategy tools that could be useful in a world of networks and interaction (Cheng and Holmen 2015) could provide inspiration for possible tools to follow. As stated by Dubois and Gadde (2002, p. 554), "the interaction between a phenomenon and its context is best understood through in-depth case studies." Studies can be designed to understand how the STs emerge from the relationships and are drawn upon to motivate, relate, or involve when working strategically with important business counterparts. Studies can also consider how STs are shaped by and shape the relationship, drawing on resource interaction literature (Baraldi et al., 2012; Håkansson and Waluszewski, 2002). This could reveal more concepts of ST use in an interactive context, especially when studies have revealed different ways of involving counterparts (Harrison et al. 2010), and have categorized strategies pointing to differences in what part of the network is considered and what part is included (Öberg et al., 2016). It can also be very interesting to focus on ST use on new ventures from an interactive view where generic patterns in network development have been found to exist (Aaboen et al., 2013). Focusing on the three dimensions of relationships suggested in this paper represents a first step toward interpreting ST use in strategic action in an interactive context. Future research in this direction could aim to discover additional uses of ST in an interactive context.

Regarding managerial implications, practitioners should be sensitized that use of an ST to relate to important counterparts becomes emerging, interacted and valuable only in relation to specific others. That is, the relationship is still the starting point and is unique, and there is no best-practice or one-size-fits-all approach, as the tool's value is unknowable until it is revealed how it can affect the substance of a specific relationship. Finding a purposeful interactive way of using a tool is one opportunity to engage in strategic action. A particular interaction can augment a tool's potential or a particular relationship can undermine its use. Every practitioner should analyze their relationship embeddedness, and those of their immediate connections, in order to grasp the variety of STs available.

References

- Aaboen, L., Dubois, A., and Lind, F. (2013), "Strategizing as networking for new ventures", *Industrial Marketing Management*, Vol. 42 No. 7, pp. 1033–1041.
- Abrahamsen, M. H., Henneberg, S. C., Huemer, L., and Naudé, P. (2016), "Network picturing: An action research study of strategizing in business networks", *Industrial Marketing Management*, in press, http://dx.doi.org/10.1016/j.indmarman.2016.02.006.
- Araujo, L., Dubois, A., and Gadde, L.E. (2003), "The multiple boundaries of the firm", *Journal of Management Studies*, Vol. 40 No. 5, pp. 1255–1277.
- Axelsson, B., and Easton, G. (1992), *Industrial networks: A new view of reality*. Routledge, London.
- Balogun, J. (2003), "From blaming the middle to harnessing its potential: Creating change intermediaries", *British Journal of Management*, Vol. 14 No. 1, pp. 69–83.
- Baraldi, E. (2008), "Strategy in industrial networks: Experiences from IKEA", *California Management Review*, Vol. 50 No. 4, pp. 99–126.

- Baraldi, E., Brennan, R., Harrison, D., Tunisini, A., and Zolkiewski, J. (2007), "Strategic thinking and the IMP approach: A comparative analysis", *Industrial Marketing Management*, Vol. 36 No. 7, pp. 879–894.
- Baraldi, E., Gressetvold, E., and Harrison, D. (2012), "Resource interaction in interorganizational networks: Foundations, comparison, and a research agenda", *Journal of Business Research*, Vol. 65 No. 2, pp. 266–276.
- Bizzi, L., and Langley, A. (2012), "Studying processes in and around networks", *Industrial Marketing Management*, Vol. 41 No. 2, pp. 224–234.
- Blumer, H. (1954), "What is wrong with social theory?" *American Sociological Review*, Vol. 19 No. 1, pp. 3–10.
- Bowman, E., Singh, H., and Thomas, H. (2002), "The domain of strategic management: History and evolution", in Pettigrew, A. M. Thomas, H. and Whittington, R. (Eds.) *Handbook of strategy and management,* Sage, London, pp. 31-51.
- Cheng, C. and Holmen, E. (2015). "Relationship and networking strategy tools: characterizing the IMP toolbox", *IMP Journal*, Vol. 9 No. 2, pp. 177-207.
- Clark, D. (1997), "Strategic management tool usage: A comparative study", *Strategic Change*, Vol. 6, 417–427.
- Clark, T. (2004), "Strategy viewed from a management fashion perspective", *European Management Review*, Vol. 1 No. 1, pp. 105–111.
- Dubois, A. (1998), Organising industrial activities across firm boundaries, Routledge, London.
- Dubois, A., and Gadde, L.E. (2002), "Systematic combining: An abductive approach to case research", *Journal of Business Research*, Vol. 55 No. 7, pp. 553–560.
- Dubois, A., and Gadde, L.E. (2014), "'Systematic combining'—A decade later'', *Journal of Business Research*, Vol. 67 No. 6, pp. 1277–1284.
- Dubois, A., and Gibbert, M. (2010), "From complexity to transparency: Managing the interplay between theory, method and empirical phenomena in IMM case studies", *Industrial Marketing Management*, Vol. 39 No. 1, pp. 129–136.
- Dubois, A., and Håkansson, H. (2002), "Conceptualising business relationships", *Journal of Customer Behaviour*, Vol. 1 No. 1, pp. 49–68.
- Ford, D., Gadde, L.E., Håkansson, H., Lundgren, A., Snehota, I., Turnbull, P.W., and Wilson, D. (1998), Managing business relationships, Wiley, Chichester.
- Ford, D., Gadde, L.E., Håkansson, H., and Snehota, I. (2003), *Managing Business Relationships* (2nd ed.), John Wiley & Sons, Chichester.
- Ford, D., Gadde, L.E., Håkansson, H., Snehota, I., and Waluszewski, A. (2010), "Analyzing business interaction", *The IMP Journal*, Vol. 4 No. 1, pp. 82–103.
- Ford, D., and Håkansson, H. (2006), "The idea of business interaction", *The IMP Journal*, Vol. 1 No. 1, pp. 4–20.
- Ford, D., and Mouzas, S. (2013), "The theory and practice of business networking", *Industrial Marketing Management*, Vol. 42 No. 3, pp. 433–442.
- Gadde, L.E., Huemer, L., and Håkansson, H. (2003), "Strategizing in industrial networks", *Industrial Marketing Management*, Vol. 32 No. 5, pp. 357–364.
- Golsorkhi, D., Rouleau, L., Seidl, D., and Vaara, E. (2010), "Introduction: What is strategy as practice?" in Golsorkhi, D. Rouleau, L. Seidl, D. and Vaara, E. (eds.), *Cambridge handbook of strategy as practice* Cambridge University Press, Cambridge, pp. 1-20.
- Håkansson, H. (1982), *International Marketing and Purchasing of Industrial Goods: An Interaction Approach*, John Wiley & Sons, Chichester.
- Håkansson, H., and Ford, D. (2002), "How should companies interact in business networks?" *Journal of Business Research*, Vol. 55 No. 2, pp. 133–139.

- Håkansson, H., Ford, D., Gadde, L.E., Snehota, I., and Waluszewski, A. (2009), *Business in networks*, Wiley, Hoboken, NJ.
- Håkansson, H., and Johanson, J. (1992), "A model of industrial networks", in Axelsson, B. and Easton, G. (eds.), *Industrial networks: A new view of reality*, Routledge, London, pp. 28–34.
- Håkansson, H., and Snehota, I. (1989), "No business is an island: The network concept of business strategy", *Scandinavian Journal of Management*, Vol. 5 No. 3, pp. 187–200.
- Håkansson, H., and Snehota, I. (1995), *Developing relationships in business networks*, Routledge, London.
- Håkansson, H., and Snehota, I. (2006), "No Business Is an Island' 17 years later", *Scandinavian Journal of Management*, Vol. 22 No. 3, pp. 271–274.
- Håkansson, H., and Waluszewski, A. (2002), *Managing technological development: IKEA, the environment and technology*, Routledge, London.
- Harrison, D., Holmen, E., and Pedersen, A.-C. (2010), "How companies strategise deliberately in networks using strategic initiatives", *Industrial Marketing Management*, Vol. 39 No. 6, pp. 947–955.
- Hill, T., and Westbrook. (1997), "SWOT analysis: It's time for a product recall", *Long Range Planning*, Vol. 30 No. 1, pp. 46–52.
- Hodgkinson, G.P., Whittington, R., Johnson, G., and Schwarz, M. (2006), "The role of strategy workshops in strategy development processes: Formality, communication, coordination and inclusion", *Long Range Planning*, Vol. 39 No. 5, pp. 479–496.
- Holmen, E. (2002), "Notes on a conceptualisation of resource-related embeddedness of interorganisational product development", doctoral thesis, University of Southern Denmark, Sönderberg.
- Jahre, M., Gadde, L.E., Håkansson, H., Harrison, D., and Persson, G. (2006), *Resourcing in logistics: The art of systematic combining*, Liber, Lund.
- Jarzabkowski, P., and Kaplan, S. (2014), "Strategy tools-in-use: A framework for understanding 'technologies of rationality' in practice", *Strategic Management Journal*, Vol. 36 No. 4, pp. 537–558.
- Jarzabkowski, P., and Spee, A. P. (2009), "Strategy-as-practice: A review and future directions for the field", *International Journal of Management Reviews*, Vol. 11 No. 1, pp. 69–95.
- Jarzabkowski, P., and Wilson, D. C. (2006), "Actionable strategy knowledge: A practice perspective", *European Management Journal*, Vol. 24 No. 5, pp. 348–367.
- Johanson, J., and Mattsson, L. G. (1992), "Network positions and strategic action", in Axelsson B. and Easton G. (eds.), *Industrial Networks: A New View of Reality*, Routledge, London, pp. 28–34.
- Kaplan, S. (2011), "Strategy and PowerPoint: An inquiry into the epistemic culture and machinery of strategy making", *Organization Science*, Vol. 22 No. 2, pp. 320–346.
- Kaplan, S., and Jarzabkowski, P. (2006), "Using strategy tools in practice—How tools mediate strategizing and organizing", AIM research working paper series, Advanced Institute of Management, London, available at http://ssrn.com/abstract=1309556 (accessed 21 February 2011).
- Kvale, S., and Brinkmann, S. (2009), *InterViews: Learning the craft of qualitative research interviewing* (2nd ed.), Sage Publications, Thousand Oaks, CA.
- Öberg, C., Shih, T.T.-Y., and Chou, H.-H. (2016), "Network strategies and effects in an interactive context", *Industrial Marketing Management*, Vol. 52, 117–127.
- Penrose, E.T. (1959), The Theory of the Growth of the Firm, Basil Blackwell, Oxford.

- Ragin, C.C. (1992), "Chapter 10 'Casing' and the process of social inquiry", in Ragin, C.C. and Becker, H.S. (eds.), *What is a case?: Exploring the foundations of social inquiry*, Cambridge University Press, Cambridge, pp. 217-226.
- Regnér, P. (2003), "Strategy creation in the periphery: Inductive versus deductive strategy making", *Journal of Management Studies*, Vol. 40 No. 1, pp. 57–82.
- Rigby, D. (2001), "Management tools and techniques: A survey", *California Management Review*, Vol. 43 No. 2, pp. 139–160.
- Ritter, T., Wilkinson, I.F., and Johnston, W.J. (2004), "Managing in complex business networks", *Industrial Marketing Management*, Vol. 33 No. 3, pp. 175–183.
- Rouleau, L. (2013), "Strategy-as-practice research at a crossroads", *Management*, Vol. 16 No. 5, pp. 547–565.
- Spee, P. A., and Jarzabkowski, P. (2009), "Strategy tools as boundary objects", *Strategic Organization*, Vol. 7 No. 2, pp. 223–232.
- Stenfors, S. (2007), "Strategy tools and strategy toys: Management tools in strategy work", doctoral thesis, Helsinki School of Economics, Helsinki.
- Whittington, R. (2001), *What is strategy—And does it matter?* (2nd ed.), Thomson Learning, London.
- Whittington, R. (2003), "The work of strategizing and organizing: For a practice perspective", *Strategic Organization*, Vol. 1 No. 1, pp. 117–125.
- Whittington, R. (2004), "Strategy after modernism: Recovering practice", *European Management Review*, Vol. 1 No. 1, pp. 62–68.
- Whittington, R. (2006), "Completing the practice turn in strategy research", *Organization Studies*, Vol. 27 No. 5, pp. 613–634.
- Whittington, R., Cailluet, L., and Yakis-Douglas, B. (2011), "Opening strategy: Evolution of a precarious profession", *British Journal of Management*, Vol. 22 No. 3, pp. 531–544.
- Whittington, R., Jarzabkowski, P., Mayer, M., Mounoud, E., Nahapiet, J., and Rouleau, L. (2003), "Taking strategy seriously—Responsibility and reform for an important social practice", *Journal of Management Inquiry*, Vol. 12 No. 4, pp. 396–409.
- Whittington, R., Molloy, E., Mayer, M., and Smith, A. (2006), "Practices of strategising/organising—Broadening strategy work and skills", *Long Range Planning*, Vol. 39 No. 6, pp. 615–629.
- Wilkinson, I., and Young, L. (2002), "On cooperating: Firms, relations and networks", *Journal of Business Research*, Vol. 55 No. 2, pp. 123–132.

(Insert Appendix here)

Table 1 Overview of informants, business relationships and tool use in the respective dimensions

	Focal firm Important Selected Tool use in Specific use of tool in the										
	rocai iii iii	relationship(s)	tools	relationship			relationship: Interactive effects				
				dimensions			identified				
				Ac	A R						
				Actor	Resource	Activity					
					rce	ty					
1.	ConstructionCo Sub-division of	ConcreteCo Supplier of	Framework				- Overcome hurdles of communication with internal				
	construction firm	cement,	agreements (Supplier				network				
	specializing in	concrete	perspective)				- Motivate ConcreteCo to share				
	constructing public	Concrete	perspective)				product knowledge (use of				
	infrastructure (e.g.	PlumbCo					concrete by other actors)				
	highways, bridges,	Supplier of					- Act as bridge for ConcreteCo				
	schools, hospitals,	plumbing					to access ConstructionCo's				
	residential homes)	services					resources				
2.	LiftCo	DrillCo	Conferences				- Capture and realize efficiency				
	Subsidiary of worldwide leader	Owner and operator of drill	(Customer perspective)				in coordination with DrillCo; provide a "playground" where				
	in the design,	ships	perspective)				ideas and opportunities are				
	manufacture and	Simpo					grown				
	sale of equipment	ShipyardCo					- Act as platform for learning				
	and components	Major					about land rigs and				
	used in O&G	shipbuilder in					broadening activity links				
	drilling and	Asia					- Provide interaction space to				
	production						influence ShipyardCo in the				
							presence of DrillCo				
3.	ContractorCo	PipesCo	Supplier				- Match goals mutually with				
	Business unit	Supplier of	scorecard				PipesCo				
	responsible for	pipes and pipe	(Supplier			1	- Align perceptions as a				
	maintenance,	fittings	perspective)				concerned and engaged				
	modifications and						customer to PipesCo Renew actor bonds amidst				
	operation services and solutions to						- Renew actor bonds amidst recent turn of events in				
	the O&G industry						relationship				
	inc occo mausu y						Telutioniship				
	Note:										

Note:

■ Major emphasis

☐ Secondary emphasis

Appendix

Overview of informants and interviews conducted

Firm	Role of Informant	Length of interview (mins)	
		First interview	Second interview
Supplier perspective			
ConstructionCo	Department Procurement Manager (DPM) ¹	100	75
	International Purchasing Manager (IPM)	120	165
LiftCo	Purchaser—Fabrication	60	-
ContractorCo	VP, Strategic Sourcing (VPSS) ²	105	30
Customer perspective			
ConstructionCo	Department Manager—Sales and Market	65	-
LiftCo	Area Manager, Business Development (AMBD)	75	90
	Director, Business Development (DBD) ³	90	30
ContractorCo	orCo VP- Strategy and Business Development ²		-

¹In conjunction with visit to the department

²In conjunction with visit to the corporate headquarters and strategy department

³In conjunction with visit to the department including tour of factory, test beds etc.