

Improving regional supplier - sub supplier network

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MASTER THESIS

May 2013

Master Thesis



Vestfold University College
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P.O.Box 2243
N-3103 Tønsberg

Availability

OPEN

CONFIDENTIAL

TITLE

Improving regional supplier – sub supplier network

AUTHOR

Morten Grindrud Leirimo

DATE OF DELIVERY

NUMBER OF PAGES

RESEARCH PROJECT

VRI Vestfold

SUPERVISOR

Anne H. Gausdal

3 KEYWORDS

Regional network; supplier sub supplier interaction; communication

SUMMARY

The research question is "How to improve the collaboration between supplier and sub suppliers to create a competitive advantage for both?" The answer to this question is that the opportunity to meet in an arena created by a third party, would encourage to increase communication and sharing of experience. Group work is an important ingredient in such an arena. In order to increase communication and knowledge sharing, it may lead to a higher level of trust and trust building processes, which again can lead to closer relationships.

SUMMARY (contin.)

Closer relationships between supplier and sub supplier will hopefully improve the collaboration. If they manage to create a positive circle of these variables, and continuous improvement of the positive circle in their regional network, it may be a competitive advantage for both.

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Abstract

This study consists of theoretical insights as to how a regional supplier and sub supplier network may increase the relationship, trust and communication in an arena, related to knowledge sharing and interpersonal learning. The work is divided into chapters of theory and methods, and results and discussions regarding my findings. There has been a qualitative case study with a single case. The case selected for this study, relates to building a supplier – sub supplier network in the maritime sector in the Norwegian Buskerud and Vestfold region. The overall research question is how to improve collaboration between supplier and sub suppliers in order to create a competitive advantage for both? The answer to this question is, that if the supplier and sub supplier meets in a common arena, they would encourage increased communication and sharing of experience. This may lead to the building of trust and the development of closer relationships, which could be a competitive advantage for both.

Aknowledgements

Writing this master thesis has no doubt been the most difficult work I have ever done, and it has given me several sleepless nights. However, it has also been an educational and inspiring journey, which I would not be without. I have learned and experienced a lot about theories and daily work, and I have also developed personally and mentally. I have met lots of different people, and have had the opportunity to follow and learn how things work in real life.

First and foremost I want to thank my main supervisor Anne H. Gausdal. You have been very helpful and have given me the confidence to conduct this master thesis. You have provided me with relevant literature, shared valuable knowledge and insight. You have also been very strict and direct, something that I have needed. We have had good and open communication during this semester, and again I am very grateful that you said yes to supervise me this year.

My second supervisor Marius Imset also deserves my gratitude. You helped me create contact with the companies, got me on track from the beginning of this thesis and you also advised me to contact Anne for supervision. Furthermore, I want to thank Karin Gauteplass for helping me with my language in this thesis. You have supported me during this semester with your language knowledge, even when you had a hectic work life. I also want to thank Vestfold University College for giving me the opportunity to write this master thesis. The key informants also deserve my gratitude and thanks for being so positive and open minded during the interview period.

I also want to thank my girlfriend Ellen, you have made it possible for me to finish this thesis with your positive mindset and strict talk when I needed a push. You have listened to my frustration, supported me, gave me the necessary calm when it was needed and also convinced me that I was able to manage this study. My friend Stian also deserves a thank for

having taken the time to listen to all my frustration and for trying to get me into other thought's when I needed it the most.

Last but not least I want to thank my family, especially my mother Venche, my father Bjørn and my sister Hilde, for their support and for giving me the confidence I needed to finish my thesis. When I struggled the most, they also made me aware that other things in life are important too. I would also like to thank my father for help with the printing, in addition to other types of administrative work.

Morten Grinderud Leirimo

Kongsberg, May 2013

1. Introduction

According to different companies I have spoken with, a regional supplier – sub supplier network is a common focus area in most industries in general, and in maritime industries in Buskerud/Vestfold in particular. This was a challenge they indicated that they wanted to illuminate. In relation to my topic "How to improve the collaboration between supplier and sub suppliers to create a competitive advantage for both?" there are distinctive ways to organize supplier – sub supplier relationships. According to Biong and Nes (2009) there are firms that have short contracts with sub suppliers, something that causes them to change sub suppliers often. While on the other hand there are firms, who only have few a sub suppliers and long lasting contracts. So the question is if there is a type of supplier – sub supplier relationship that is more competitive than the other? A better regional network between supplier and sub suppliers could be an advantage since, as mentioned previously, most industries in general and maritime industries in particular, would need to develop their own competitiveness. Senge (1990) claims that knowledge is the most important strategic resource for a firm, and that the competitive advantage in the long run is to learn faster than your competitors. Hopefully this thesis can be a guidance which can lead to more focus and better collaboration within the specific industry, in order to create a regional knowledge network that can develop the industry's competitive advantage. Relationships between organizations include a set of different factors, some of which are trust, communication, networks and shared arenas. So what can exactly lead to a competitive advantage in regional supplier – sub supplier networks? Which processes and structures are needed to expand their relationships and share knowledge?

2. Theory

The purpose of this master thesis is to discuss and look at key elements that can create a regional supplier - sub supplier network, which can contribute to increasing the competitive advantage for both. In order to increase the competitive advantage there are several factors that may have an effect, such as mutual trust and openness towards each other, communication, relationships, knowledge sharing, shared arenas and networks, all which may be key factors for success. Analyses of organizations in well functioning networks have been studied by several researchers in order to mark success factors in relation to the already existing relationships among the organizations (Gertler, 2001; Jack, 2005; Lundvall, 1988, 1996). In this chapter, the theories are organized in the following matter: regional supplier – sub supplier networks, trust, communication and arena.

2.1 Regional Supplier – Sub Supplier Networks

Focus on the questions regarding why networks exist (Richardson, 1972) and how they emerge (Grabher, 1993) have been on the agenda for socio-scientific research for a long time. SME networks, which is an abbreviation for small-and medium-sized enterprise networks, have emerged as a “result of an unanticipated and unplanned coordination between firms with complementary resources and mutual objectives” (Gausdal, 2012a, p. 2). Porter (1990, p. 151) explains “Interconnections(...) often unanticipated, lead to entirely new opportunities. People and ideas combine in new ways.”

During the 1980s and early 1990s the thematic changed regarding the properties of successful networks. This got several scientists developing analyses of organizations in well functioning networks in order to mark success with different relationships between the organizations (Gertler, 2001; Jack, 2005; Lundvall, 1988). Porter stated an idea about clusters which I call refer to as regions, as a specific category of geographically concentrated

networks. He also argued that regions that have remarkably demanding customers, competent suppliers, a specific combination of participant organizations, specific support industries and a specific set of relationships between organizations, have a higher level of economical success (Porter, 1990; Porter & Sölvell, 1998; Saxenian, 1994).

According to Gausdal (2008) the purpose of SME networks is to get firms to collaborate with other firms in order to gain competitiveness and innovativeness. The beneficial key word for such networks is knowledge mobility, which Dhanaraj and Pharkhe (2006) defines that knowledge needs to be deployed, acquired and shared in the network.

In this master thesis the word network is related to the gathering of suppliers and sub-suppliers and their relationship, interaction and communication. As claimed in Littlejohn and Foss (2008, 2005, p. 260) “Networks are social structures created by communication among individuals and groups”. It is also mentioned that the fundamental idea of network theory is connectedness, which means that communication between individuals is reasonably stable (Littlejohn & Foss, 2008, 2005). Communication between individuals will link them together in smaller groups, which again are tied into the overall network. Personal networks are related to unique ties between individuals in an organization. Group networks are the communication between other individuals, which are tied together in larger groups in organizational networks (Littlejohn & Foss, 2008, 2005). To create a picture of how the networks are related, Littlejohn and Foss (2008, 2005, p. 261) illustrate what it could look like. In social network theory the word “tie” is often reproduced and is defined by Granovetter (1973, p. 1365) as a “local bridge of degree n ” where the letter n is the shortest path between two points and n is bigger than 2 ($n > 2$). I will be using the term tie or relationship, instead of link or connection in this study.

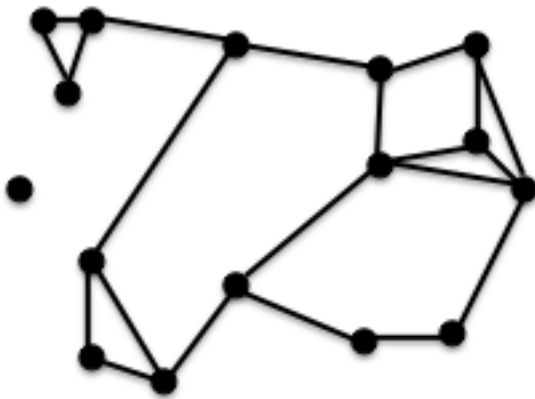


Figure 2.1 A Simple Network (Littlejohn & Foss, 2008, 2005, p. 261)

To analyze a network there are several things to look at. The first thing to look at is the relationship or tie between two individuals, which is called analysis of dyads. When looking at the relation between three individuals it is called analysis triads. Furthermore, there is an opportunity to look at how individuals are related into groups and subgroups, and finally how these groups and subgroups are tied into regional (which is the aim for this study) or global networks (Littlejohn & Foss, 2008, 2005). The analysis of the quality of relationships in networks could be helpful to look at, in order to find out how the quality of ties or relationships between both individuals and organizations are, such as trust, communication, friendship, relations, information sharing and so on. These types of aspects and analysis are called multiplexity (Littlejohn & Foss, 2008, 2005). The ties between individuals could have more than one purpose, which means that the purpose is e.g. both information sharing business and friendship. These types of relations can be initiated and created in other arenas, such as seminars or other gatherings, where information sharing, communication, relationship building is facilitated. The ties can be a direct line between two individuals or it can be indirect, where two individuals are connected by a third party (Littlejohn & Foss, 2008, 2005).

As claimed by Littlejohn and Foss (2008, 2005, p. 261) the interest in organizational learning and knowledge creation has, in modern years, had a significant increase. Because tacit knowledge is crucial for the creation of new knowledge, (Nonaka et al., 2000) sharing this kind of knowledge is of special interest. Tacit knowledge was first introduced by Polanyi (1966, p. 4) arguing that “We know more than we can tell”. According to Polanyi (1966) knowledge is divided into two different categories, tacit (know how) and explicit. Tacit knowledge is individual perception, intuition, bodily movement and physical experiences. Tacit knowledge is hard to formalize, context-dependent, experienced and highly personal, in addition it is difficult to transfer context between individuals (Polanyi, 1966). These are skills that people will/can evolve over time, but by own experience it is hard or even impossible to copy. On the other hand explicit knowledge can be communicated in a formal systematic language and is independent according to context (Nonaka, 1994) or defined as knowledge that can be drawn on paper or formulated in sentences (Krogh, Ichijo, & Nonaka, 2000). Explicit knowledge can also be stored and captured in symbolic and graphic symbols as well as writing (Styhre, Josephson, & Knauseder, 2006). Krogh et al. (2000, p. 181) also claims that an important part of knowledge creation is social interaction, since “individual face-to-face interaction is the only way to capture the full range of physical sensation and emotional reactions that are necessary for transferring tacit knowledge”. According to Krogh et al. (2000), production networks that are good at sharing and communicating tacit or know-how knowledge are likely to outperform competing networks. With that in mind, smaller networks may have an advantage compared to larger networks.

In the matter of information sharing in a network, “weak ties” are often necessary. “Weak ties” are defined as infrequent and distant relationships which are efficient for accessing of novel information (Granovetter, 1973), while “strong ties” are defined as a

relationship with frequent communication and a high concentration of emotional closeness (Burt, 1992; Granovetter, 1973). In order to generate value to individual members, the size and width of the network could be a factor for the diverse information available for the members. With that in mind, it requires “strong ties” to the other members in the network, because the tacit or know-how knowledge as previously mentioned, is difficult to transfer/codify. To acquire information good relationships are important, as it is easier to ask people for information, rather than searching for information in databases and documents. According to Allen (1977), referred in Gausdal (2008) it is significantly more likely for engineers and scientists to ask other people, rather than look up information in an impersonal source.

The importance of a regional network is quite noticeable, but in order to claim that it is important to try to define a region, something that can be quite difficult. In Gausdal (2008, p. 20) four criteria for defining a region are listed: “ a) It must not have a determinate size; b) It is homogenous in terms of specific criteria; c) It can be distinguished from bordering areas by a particular kind of association of related features; d) It possesses some kind of internal cohesion”.

In this master thesis, the word regional network is mostly used when describing the network between supplier and sub suppliers, which in this case generally is located in Buskerud and Vestfold. But there are also other kinds of organizations related to this regional network, e.g. Vestfold University College and Buskerud University College, which both are located in the same region as the supplier and their regional network. In order to solve problems together, regarding both organizational issues and technical solutions, the term regional collective learning can be used. According to Keeble (2000), regional collective learning is defined, as a base for shared and common knowledge between individuals, and can be used as a coordinating element when solving problems in relation to the organizational and

technical issues that they confront. It is also claimed in Gausdal (2012a, p. 4) that a trustful relationship in a network involves two key factors: “1) that people are connected in a relationship; 2) that the people in the relationship trust each other mutually.”

Knowledge mobility has various characteristics and the different challenges regarding knowledge mobility are significant (Gausdal, 2012a). Knowledge mobility includes; explicit, tacit and codified knowledge (Nonaka, 1994; Polanyi, 1966). It also includes symbolic and analytical knowledge (Coenen & Asheim, 2006), in addition to know-why, know-who, know-how and know-what knowledge (Lundvall & Johnson, 1994). Tacit knowledge is also difficult to share without social interaction (Nonaka, 1994). Know-why is related to knowledge in the human mind, society, principals and the laws of motion in nature and it has been significant in technological development. Know-who is about what individuals know, which individual who know what to do and further to establish a relationship with the groups where they can attend with their expertise. Know-how is related to the individuals that know how to do practical work, scientific work and so on, in addition to which individual that knows how to do a certain thing. The last one is know-what, which is related to information and knowledge about facts (Gausdal, 2012a). Know-why and know-what are related to information and can be research developed, codified and explicit, it is also called analytical knowledge (Coenen & Asheim, 2006). While on the other hand know-who and know-why are both related to informal and practice-based tacit knowledge which is called synthetic knowledge (Coenen & Asheim, 2006).

Analytical knowledge is correlated with meetings, speeches, articles, journals, books and even information found on the Internet, which are easy transferrable and not trust dependent (Gausdal, 2012a). On the other side synthetic knowledge is related to collaboration, social interaction and trust building, which is more difficult (Gausdal, 2012a).

There is no guarantee that networks will end up successfully, and some end up as costly failures (Inkpen, 1996; Nooteboom, 2002; Pittaway, Robertson, Munir, Denyer, & Neely, 2004; Powell, Koput, & Smith-Doerr, 1996) which for instance may be related to the lack of trust (Das & Teng, 1998; Nooteboom, 2002) or lack of the knowledge sharing certain form of consistency in order to increase the yield of the knowledge sharing process, so that the opportunity for both success and failure according to learning and knowledge sharing is present in a network (Gausdal, 2008).

According to Dyer and Nobeoka (2000) both academics and executives have agreed that to achieve a sustainable competitive advantage, organizational learning is the key factor. However, De Geus (1988, p. 71) argues that “the ability to learn faster than your competitors may be the only sustainable competitive advantage.” Dyer and Nobeoka (2000) also claim, together with other theorists, that inter-organizational learning is critical in order to achieve competitive success. This means that the best way to obtain organizational learning, is when you observe and import practices from other organizations, or collaborate with other organizations/sub suppliers (Levinson & Asahi, 1996; March & Simon, 1958; Powell et al., 1996). It is also argued that a production network, which extradites knowledge processes with sub suppliers and other interests, will have an advantage compared to other production networks with less effective knowledge sharing processes. However, there is a tradeoff when network members protect their proprietary knowledge by engaging in behavior or thinking too much about devise rules, so that there will be no valuable knowledge shared in the network (Dyer & Nobeoka, 2000). A firm’s most valuable knowledge, a knowledge that also is valuable for other firms, is the knowledge the firm wants to keep proprietary (Dyer & Nobeoka, 2000).

Japanese automakers, especially Toyota, have a leading position when it comes to bilateral and multi-lateral knowledge sharing routines with their suppliers. This has resulted in

high network learning and inter-organizational learning. The reason why the Toyota case is emphasized here is because Toyota is recognized as a leader in continuous learning and improvement, and is often used as a good example and role model for others. Dyer and Nobeoka (2000, p. 3) state that Toyota is “regularly voted by Japanese executives as the best managed and the most respected Japanese company.” Further they claim that Toyota’s inter-firm knowledge networks may be used as a model for the future.

According to Dyer and Nobeoka (2000), to create an effective knowledge-sharing network there are a number of issues that play an important role. The first issue is creating organizational units for achieving knowledge in the network. There is a need for creating organizational units with responsibility for diffusion, storage and knowledge acquisition in order to increase the ability of the network and create a greater stock of valuable knowledge. This means that the organizational units have created and added knowledge to the already existing stock of knowledge within the network, which again leads to an easier and straightforward relationship to the supplier for the sub-suppliers if they need help with a problem.

According to Dyer and Nobeoka (2000), the next issue is to eliminate proprietary knowledge within particular knowledge domains. This means that by eliminating the notion that there is propriety knowledge and state that very little of the knowledge in a firm’s processes is proprietary (Except from special technology/designs etc.). So by providing free assistance to the sub-suppliers and free access to the stock of knowledge, a reciprocal knowledge norm is created in the network. On the other hand, the sub-suppliers must be willing to share and open up their units/plants to the supplier and sub-suppliers. Opening up their units/plants for inspections and knowledge-sharing what is however a high price of entry, that may lead to elimination of the free rider problem (Dyer & Nobeoka, 2000). So by helping some of the core sub-suppliers that are willing to open up and share their knowledge,

what they have learned from their contracting supplier will help other sub-suppliers in the whole value chain in the future (Dyer & Nobeoka, 2000).

The third issue by Dyer and Nobeoka (2000) is related to creating multiple knowledge-sharing processes and nested networks in larger networks. This means that both tacit and explicit knowledge in the network is based on bilateral and multi-lateral processes. This allows members in the network to learn and create relationships or ties with other members or nested networks, which again may lead to knowledge flowing in an efficient manner if the type of knowledge matches the process. So then for a particular topic/knowledge domain there is a process that allows multi-lateral transfers of tacit knowledge. However, the more tacit the knowledge is, the smaller the knowledge network is. According to Dyer and Nobeoka (2000), creating and managing a high performance knowledge-sharing network is not definitive of how to network, hence following their examples does not guarantee that you have success. It will differ from culture and mindset in different parts of the world and in different organizations, however it is possible to learn from their study and perhaps find some guidelines and input that can be used in other organizations and cultures.

2.2 Trust

Trust is claimed by Keeble (2000) as being the essential for co-operation and therefore an interest for the research problem of creating trust. Gausdal (2008, p. 28) believes that “social mechanisms can be intentionally played out as a triggering processes creates trust”, while Granovetter (1973) states in Gausdal (2008, p. 28) “that trust cannot be intentionally created”. However Gausdal and Hildrum (2011) claims that building trust can be intentionally facilitated. In this study trust is considered as a mechanism of communication, relationship and knowledge sharing between a supplier and sub-suppliers. In knowledge sharing, trust is mutual; both when it comes to sharing knowledge and absorbing knowledge (Krogh, 1998).

Krogh (1998) also claims that individuals become more unavailable with explicit verifiable knowledge when the trust level becomes low.

Trust is defined in several ways in social sciences and has different functions (Gausdal, 2008). The meaning of trust can be split into two different dimensions: creditability and reliability. With these two dimensions in mind, it is important to create a win/win situation for the two parties negotiating. They should trust each other enough to work together in creating a best possible outcome for both. The focus on this study is, according to most trust theories on interpersonal trust. Mayer, Davis, and Schoorman (1995, p. 712) define interpersonal trust as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party”. This means that to be able to trust someone you have to take the risk of trusting, which on the other hand means that you are leaving yourself open for being disappointed, vulnerable or even hurt (Gausdal, 2008). But there are trust-building concepts that do not require interpersonal contact such as; characteristic-based trust (Zucker, 1986), common background or similar demographic profile (Levin, Whithener, & Cross, 2006), third-party relationships (Burt, 2001; Ferrin, Dirks, & Shah, 2006), corporate cooperation culture (Abrams, Cross, Lesser, & Levin, 2003), general trust on norm (Akerlof, 1983), persons tendency to trust (Rotter, 1971) and institution-based trust (Williamson, 1996).

Interpersonal trust can be divided into two dimensions related to sharing and knowledge creation in networks: competence and benevolence (Gausdal, 2008). Competence can be described as when “you have relevant expertise and can be depended upon to know what you are talking about”(Abrams et al., 2003, p. 65). Benevolence can be defined as when “you care about me and take an interest in my well-being and goals” (Abrams et al., 2003, p.

65). In this study trust is mostly between individuals in the network and the between supplier and sub-suppliers.

To create trust between individuals, the individuals have to be connected in a network or other arena, such as for example a seminar. In every meeting between individuals there has to be some kind of trust regulated. However Krogh (1998); Zucker (1986) states that the importance of consistent behavior must be present in order to enhance trust, whereas repeated abuse may break it down (Uzzi, 1997). It is also stated by Dellarocas (2003b), that most people need a word-of-mouth reputation or a third party that arranges an introduction to motivate the two individuals to be connected. The reputation effect in any cooperation will only have an influence if there is a minimum grade of participation from a word-to-mouth reputation (Dellarocas, 2003b). It is also claimed that to build cognitive trust, (McAllister., 1995; Naphiet & Ghosdal, 1998) there has to be a dialog between two individuals who share the same visions, mindset and common narratives. Further in the cooperation, there are more personal interests involved and they observe each other's trustworthy behavior in a "encapsulated-interest account of trust" (Hardin, 2001). However to build an affective trust, there is a breeding of friendship in cooperative actions (Krackhardt, 1992a; McAllister., 1995). It is claimed by T. Yamagishi and M. Yamagishi (1994) that committed relationships which are trustworthy, related to sanctions and monitoring of strong norms, will minimize the risk of exploration when a group from the inner-circle grows their own norms and identity. With these five types of trust, Gausdal (2012b) has outlined a table to show how and what the different types of trust influence.

Table 2.1 Types of trust that requires interpersonal contact Gausdal (2012b, pp. 11-12)

Type of trust	Is influenced by	Content	Influence
Word-of-mouth (Dellarocas, 2003a)	Third party introduction	Reputation	Motivation to make friends
Cognitive (McAllister, 1995; Naphiet & Ghoshal, 1998)	Success of past interaction Consistent behaviour Reliable role performance Social, cultural or ethnical similarity	Shared language and codes Shared narratives Narratives: 1) information 2) exchange practice and tacit experience to improve practice Reliability and dependability Competence and responsibility Trustworthy Calculative	Accessibility and combination capability Ability of individuals to combine knowledge Decrease the need for control-based monitoring Direct little defensive behaviour Shared representations, interpretations and systems of meaning among parties
Encapsulated-interest account in trust (Hardin, 2001)	The value of maintaining the relationship into the future Grows out of ongoing exchange in ongoing relationships Incentives for trustworthiness	Modal trust relationships The sense of a special case Your concern with my interest Non-cognitive and non-calculative The relationship simply works	My expectations are grounded in an understanding of your interests specifically with respect to me My trusting you is encapsulated in your interest in fulfilling the trust
Affective trust (Krackhardt, 1992b; McAllister, 1995)	Long-term cooperative actions Frequent interaction Feel affection Friendship The level of citizenship behaviour directed toward you Cognitive trust	Emotional bonds between individuals Express genuine care and concerns for the welfare of partners Sharing relationship – share ideas, feelings and hope Can talk freely about and share problems and difficulties freely Considerable emotional investments The affect level is important	Engage in need-based monitoring Interpersonal citizenship: A personal interest in this individual I pass new info that might be useful to him/her I try to help him/her with my careless actions Constitutes strong tie relations
Committed relations (T. Yamagishi & M. Yamagishi, 1994)	Social uncertainty People accumulate information sufficient for allowing certainty about the partner's intentions.	People have mutual control over each other in such close and stable relationships Monitoring and sanctioning of strong norms, so risk of exploitation will be minimized Induce the partner to take a certain course of action with the use of strategies such as 'tit-for-tat'.	Reduce the need for trust Bilateral behaviour control, even egoists will cooperate Reduces social uncertainty

It may be difficult to write perfect contracts when the surroundings are unstable. However, with trust between the parties it will reduce the difficulties in the contract. Gulati (1998, p. 294) states that “an appropriate contract to formalize the alliance” is often chosen by the firms, which include hierarchical regulations that are often control mechanisms governed by contracts. The complexity in alliance collaborations and due to the fact that contracts generally are not sufficient enough to cover all aspects and “because it is impossible to monitor every detail in most exchanges, firms must always have a minimum level of trust”(Das & Teng, 1998, p. 494). For innovative alliances that involve diffusion and creation of knowledge, trust is considered as essential (Hatak & Roessl, 2010; Newell & Swan, 2000). It is also crucial for reducing complexity (Luhmann, 1979). Uzzi (1997) claims that creation of knowledge is enriching the opportunities and access to resources for the partners. Trust is not something a supplier or a sub-supplier has, it is something that has to be earned and created over time. To create interpersonal trust there must be a relationship between the individuals. According to Biong and Nes (2009) it is essential to have trust in an innovative co-operation. Keeble and Wilkinson (2000) mention that the main resource besides contracts is trust, which keeps networks intact and the members are able to collaborate efficiently. According to Gausdal (2012b) trust in networks seem to be important in several ways. Based on that statement and the theory in this chapter, I have made a simple figure to illustrate the relationship between the variable trust and the regional supplier – sub supplier network. The arrows point both ways to indicate that they have an effect on each other.

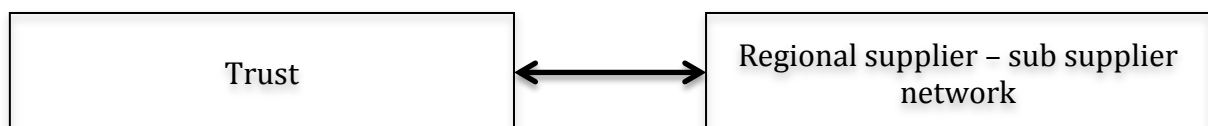


Figure 2.2 Relationship between Trust and Regional supplier – sub supplier network

2.3 Communication

From the basic dimension of communication, it is stated three points of “critical conceptual differentiation”. The dimensions are level of observation, intentionality and normative judgment. The level of observation defines inclusive, broad and general, which means that a definition of communication as “the process that links discontinuous parts of the living world to one another” (Littlejohn & Foss, 2008, 2005, p. 3) is general. However, there is also a definition that is restrictive, which means communication as “a system (including e-mails and telephones) for communicating information and orders” (Littlejohn & Foss, 2008, 2005, p. 3) is restrictive. The second dimension is, as mentioned previously, intentionality. There are definitions that only include sending and receiving messages, which is purposeful, but there are also others that do not emphasize this kind of limitations. The next example of a definition includes intention “Those situations in which a source transmits a message to a receiver with conscious intent to affect the latter’s behaviors” (Littlejohn & Foss, 2008, 2005, p. 3). On the other hand, a definition that does not require intent is “A process that makes common to two or several what was the monopoly of one or some” (Littlejohn & Foss, 2008, 2005, p. 3). The third and last definition of communication is normative judgment. This is used to differentiate between the definitions. Some definitions include effectiveness, accuracy or a statement of success. However, some definitions do not include this kind of implicit judgment. To illustrate an example of the definition, Littlejohn and Foss (2008, 2005, p. 3) indicate that communication is successful when, “Communication is the verbal interchange of a thought idea”. This definition indicates that communication shares thought and ideas successfully. On the other hand, the following definition does not judge whether the outcome is successful or not, “Communication is the transmission of information” (Littlejohn & Foss, 2008, 2005, p. 3).

The definition above states that the information has been delivered, but not necessarily received and understood. So the definition of communication is not a single clear definition, but rather a set of concepts, which means that different definitions will be used to investigate different perspectives for a researcher.

Communication today is much more than just face-to-face conversation. In these modern times communication takes place at several levels and in several ways, such as through e-mails, phone calls, messages, social media etc. all the time. Related to modernism in regards communication it is stated; Clearly, communication has assumed immense importance in our time (Littlejohn & Foss, 2008, 2005, p. 3).

According to Littlejohn and Foss (2008, 2005) communication can be divided into frequent and quality communication. Frequent communication helps the exchange of information to increase others behavior, intentions and abilities. It is also claimed by Gausdal (2012b) that with frequent interaction the involved parties will care more about each other, and will lead to better understanding of the other parts expertise, which again leads to trust that will increase the other parts competence. The quality of the communication is also important and the value of face-to-face meetings is significant, which means that the interaction will be memorable and meaningful for the involved parties (Abrams et al., 2003). To increase interpersonal trust, Abrams et al. (2003) emphasize that a need for combination of sharing, inquiring and listening is important in collaborative communication. There is also a need for transparency from both parties in order to have an open and honest communication. The need for communication will be significant, especially for sub-suppliers early in the process. Therefore, communication influences both regional supplier – sub supplier network and trust building. An increase in trust will have an effect on both regional supplier – sub supplier network and communication, while the regional supplier – sub supplier network interaction will increase with an increase in trust and communication/knowledge-sharing.

To illustrate the relation between trust, communication and regional supplier - sub-supplier network in relation to the theory in this part, I have made a simple figure which shows a direct relation both ways between trust and communication/knowledge-sharing, trust and regional supplier – sub supplier network, communication/knowledge-sharing and regional supplier – sub supplier network, which creates a positive circle. The arrows point both ways between the boxes, to indicate that they have an effect on each other.

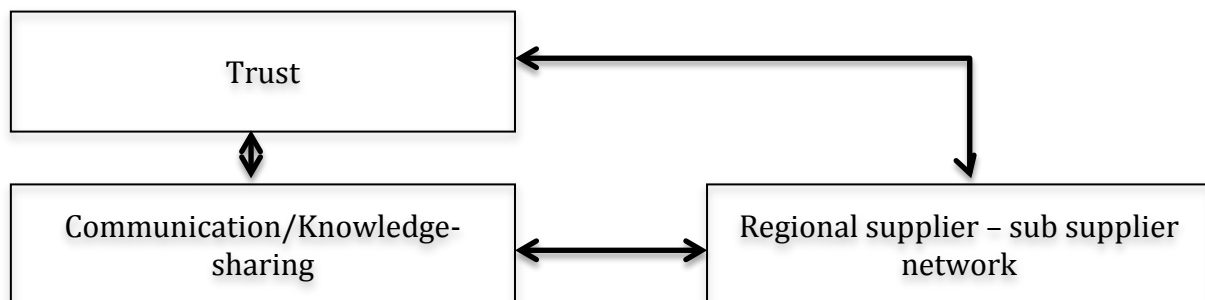


Figure 2.3 Relationship between Trust, Communication/Knowledge-sharing and Regional supplier – sub supplier network

2.4 Arenas

Knowledge (Nonaka et al., 2000) need a kind of place or context to be created. As claimed with other theorists in Nonaka et al. (2000, p. 14) “Knowledge needs a physical context to be created: there is no creation without place”. In (Nonaka et al., 2000) “Ba” is described as a place or arena, which I use in this study. “Ba” is a concept that the Japanese philosopher Kitaro Nishida first came up with, and that has been developed further by Shimizu, and talked about by several theorists over time. It is defined as “a shared context in which knowledge is shared, created and utilized” (Nonaka et al., 2000, p. 14). The word “Ba” means a specific space and time and not necessarily just a psychical place. However, it is claimed in Nonaka et al. (2000, p. 14) that Ba “is a place where information is interpreted to become knowledge”.

The arena concept includes virtual space, office space, mental space, e-mails and shared ideals with physical space (Nonaka et al., 2000). It is also stated that knowledge is not created by individuals operating alone, but through individuals interacting with other individuals and their environments (Nonaka et al., 2000). In socialization and externalization it is important for the involved parties to share space and time, which may lead to a beneficial sharing process in a close physical interaction in order to forming a common language between the involved parties (Nonaka et al., 2000). There is also a need for continuity and consistency according to the community of practice (Lave & Wenger, 1991; Wenger, 1998), which has some similarities with the concept of “Ba”, however “Ba” is a here and now quality which is fluid and can be changed quickly (Nonaka et al., 2000). The community of practice is more based on history, culture and individual changes at a micro level, while “Ba” is constantly moving and not constrained about history, the changes are made both by the individuals (micro) and “Ba” itself (macro) (Nonaka et al., 2000).

Four types of “Ba” are referred to in Nonaka et al. (2000), which I will summarize further. The four types are; Originating Ba, Dialoguing Ba, Exercising Ba and Systemizing Ba, which are all divided into two dimensions; Type of Interaction and Media. The Type of interaction is divided into Individual and Collective, while Media is divided into Face-to-face and Virtual.

Table 2.2 Four types of Ba (Nonaka et al., 2000, p. 16)

		Type of Interaction	
		Individual	Collective
Media	Face-to-face	Originating Ba	Dialoguing Ba
	Virtual	Exercising Ba	Systemizing Ba

The figure above from Nonaka et al. (2000, p. 16) is made to illustrate and create a better understanding of how the different “Ba`s” interact with each other.

Originating Ba

The Originating Ba is a place where experience, mental models, emotions and feelings are shared among individuals in an individual and face-to-face action. The face-to-face interaction enables the opportunity to capture psycho-emotional reactions and physical senses, which are elements of sharing tacit knowledge, which is important. The basis of knowledge sharing between individuals are care, trust, love and commitment from the originating of “Ba” (Nonaka et al., 2000).

Dialoguing Ba

The Dialoguing Ba is positioned with both the face-to-face and collective factors, which is where the individuals` skills and mental models are shared and converted to concepts and mutual terms. The communication between the involved parties shares their tacit knowledge and it is more consciously constructed than Originating “Ba”. It is also necessary to gather the right mix of individuals with specified knowledge to create knowledge in this “Ba” (Nonaka et al., 2000).

Exercising Ba

The Exercising Ba is placed with virtual and individual interactions. The simulation program or written manuals (virtual media) as an example, is communicated among individuals through explicit knowledge. The main difference between Dialoguing Ba and Exercising Ba is that in Dialoguing Ba the reflection and transcendence is achieved by thought, while the reflection and transcendence is achieved by action in Exercising Ba (Nonaka et al., 2000).

Systemizing Ba

Systemizing Ba is placed with both virtual and collective interactions. Information technology, through on-line networks, groups and so on, allow explicit knowledge to relatively easy reach out to a huge number of individuals in written form. Nowadays firms have groups, mailing lists or chat programs that allow them to get answers quickly, effectively, and efficiently to spread necessary information or knowledge (Nonaka et al., 2000).

The creation of knowledge is an interaction between micro and macro levels, which help build each other up to higher levels. The strengthening, trustful knowledge sharing and creating parts of the relationship between the involved parties is built up by individuals that participate in “Ba” in addition to the various “Ba`s” itself (Nonaka et al., 2000). I argue that the most important types of Ba in the supplier and sub supplier network in this study are Originating and Dialoguing Ba since their type of interaction is mostly individual and collective in face-to-face media.

The primary objective of this study is to explore the research question “How to improve the collaboration between supplier and sub suppliers to create a competitive advantage for both?” I have chosen four factors or variables to explain how the collaboration can be improved. First, I argue to develop a regional supplier – sub supplier network. Then, I argue that trust, communication and arena as important factors for developing such a network. In figure 2.4 I have created a model to illustrate that the process or positive circle of creation of a network, trust and communication need an arena to take place. The figure also shows the two-way relationship between the variables.

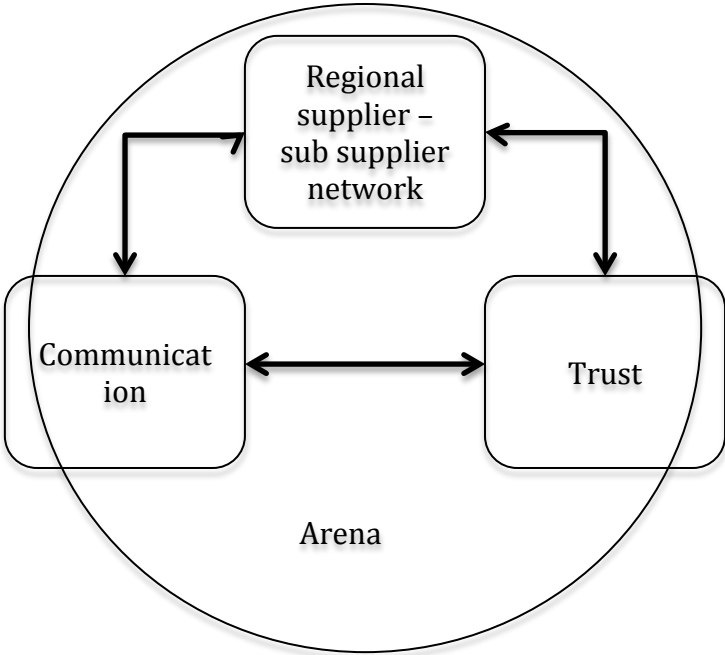


Figure 2.4 Positive circle in an arena

3. Method

This chapter is organized as follows; first there will be an introduction of the choice of method and the two main principles of methodology, participant observations, interviews, reliability and validity and key informants.

The chapter consists of theoretical insights of choice of method and a description of how I collected my data.

3.1 Choice of Method

According to Bryman and Bell (2003) a research method is a set of procedures and techniques used to answer different kinds of issues and questions. In order to answer a master thesis (or other types of reports, etc.) in a scientific way, one is dependent on a broad knowledge of methodology. This so that others can use the same methodology to find identical results. Research methods include procedures and techniques for answering questions; so that after the research questions are formulated there is time to find the right method to collect the data-material needed. Formulating a design for the scientific report is then required.

Research methods consist of two main principles; Qualitative method and Quantitative method. A qualitative science strategy is mainly based on text data, while a quantitative science strategy is based on numerical data (Ringdal, 2007). This means that in qualitative science strategy, interviews and observations of a phenomenon are most common. On the other hand, quantitative science strategy requires a relatively high amount of units, like numbers and larger surveys (Bryman & Bell, 2003).

According to Ringdal (2007), a qualitative science strategy can be considered as a research strategy that emphasizes words and interview data, rather than larger amounts of quantification in surveys and numerical data. For this type of scientific research, qualitative interviewing would be most relevant, which is a very broad term since it includes a large

amount of different interview styles. However, there will also be a relationship between the interviews and ethnography/participant observations, in order to get broader insight and knowledge about the research question. The ethnography/ participant observation is a way to approach data collection in a social, cultural and natural setting for the people/firm that are being observed. Bryman and Bell (2003) also claim that there are three different research strategy methods, such as; constructionist, inductivist and interpretivist, however qualitative researchers do not always support all three of these methods.

Alvesson and Sköldbberg (2000, p. 4) defines the choice of method like this: “A common view is that the choice between quantitative and qualitative methods cannot be made in abstract, but must be related to the particular research problem and research object”. The overall research question in this study is "How to improve the collaboration in a regional supplier - sub suppliers network to create a competitive advantage for both?"

Ringdal (2007) have developed a table with other theorists, and with some additional points related to the theory I find it appropriate to guide the choice of method. The table is presented in table 3.1.

Table 3.1 Qualitative method vs. Quantitative method (Ringdal, 2007, p. 92)

Qualitative method	Quantitative method
<ul style="list-style-type: none"> - Purpose explanations - Small samples of case - Going in depth - Proximity to what/who that are studied - Natural environment - Text data (observations, content analysis and interviews) - Flexible - Informant 	<ul style="list-style-type: none"> - Reason explanations - Large representative sample - Going in width - Distance to what/who that are studied - Artificial environment - Text Data (Statistics) - Structured - Respondent

<p>Research logic</p> <ul style="list-style-type: none"> - Interpretive subject-subject relationship. - Scientist is out in the field and may be affected by informant and vice versa. - Should try and understand the specific in its entirety. 	<p>Research logic</p> <ul style="list-style-type: none"> - The subject-object relationship. - Generalization of the device to universe. - Positivism and objectivity. - Low level of interaction between researcher and respondent
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According to table 3.1 there are some key elements that I found more important than others during my work with the master thesis. There were a relatively small amount of samples, a result due to the fact that I wanted to go in depth with every key informant. If the intention of this thesis were to go in broader with a large representative sample, it would be more relevant to use a quantitative research method. The research logic shows that in a quantitative research there is a lower level of interaction between the researcher and respondents; however the need for interaction and understanding the overall specifics in its entirety was more likely and formed this thesis. In connection with my thesis, interviewing key personnel in the industry will be most relevant and will mainly lead me into using a qualitative method. A qualitative method is, as previously mentioned, mainly based on interviews, while a quantitative method is mainly based on surveys. Therefore as I see it, this kind of thesis will primarily be based on interviews. Secondary data from observation of the specific supplier and sub-suppliers will also be used.

The research question for this thesis is related to how a closer interaction between supplier and sub-suppliers in a regional network can be a competitive advantage for a specific firm. So to answer questions as why and how this can be improved the research strategy will be case study (Yin, 2003). Hence, it was more sensible to go in depth with a few key informants using interviews and observations in their normal working environment for the specific firms.

According to my research question, my choice of method is qualitative case study with a

single case. The case selected for this study is a project to build a supplier – sub supplier network in the maritime sector in the Norwegian Buskerud and Vestfold region.

3.2 Participant Observer

I planned to do my own observations as a participant observer at seminars to build the network. A participant observer is defined in Ringdal (2007, p. 92) as follows; the researcher makes open observation of a designated field. This method gives proximity and an insider perspective. It is important to build trust to those who are being studied, so as to avoid the possibility of changed behavior because they are aware that they are being studied. To build trust I planned to mingle and be sociable at the seminar, in addition to having a respectable communication.

A seminar or arena where the supplier and sub-suppliers were gathered to discuss how they could achieve a closer interaction was organized in October 2012. I received access to secondary data from this first seminar; such as the program for the seminar, participant list, ethnographical notes, presentation data of the firms, evaluation forms from the seminar with answers and comments, individual answers and suggestions from every group in the group process and a summary of the whole seminar. The plan was to go out in the field and observe and participate in the next seminar. This would expectantly lead to natural surroundings for the interview objects and it will be easier to do observations. This next seminar has however, been postponed several times. By the end of this study, it has, still not been accomplished.

3.3 Interviews

Interviews are used to collect information regarding a specific field. My interviewees are key informants, who have knowledge and experience regarding the specific field in which I want insight. The number of informants may vary; therefore it is important to select key informants in order to create a more credible picture. In these kinds of interviews there

may be a significant variation, because of the flexibility and the open questions. This may, however, lead to a difficulty when it comes to comparing the answers. According to Ringdal (2007) there are different ways of structuring the interviews, from simple index to direct questions. I have used semi-structured interviews, where I as the interviewer assume a semi-open interview-guide based on the theory about networks, trust, communication and arenas, which gives more confidence for the interviewer, and open answers from the key informants. I made an interview guide with inputs and guidance from McCracken (1988). According to McCracken (1988) there are several parts of an semi-structured interview which are distinguished from participant observations, depth interviews, unstructured ethnographic interview and the focus group. To maximize the value of the time spent with the interviewees there is a need for thoroughly structured and prepared open ended questions (McCracken, 1988). It is also claimed by McCracken (1988, p. 9) that “The long interview gives us the opportunity to step into the mind of another person, to see and experience the world as they do themselves”.

I structured the interviews as follows:

- Opening; I gave a short introduction about the purpose of the interview and I also assured the interviewees that he would be anonymous. Initially I asked if it was ok for the interviewee that I record the interview and transcribe it afterwards. (I did this to ensure that I got all the information and details written down)
- Questions; I asked open questions based on the interview guide, which hopefully would motivate the interviewee to come with input. There were some semi-concrete questions and a few story-telling questions, which gave me some interesting stories from the real world.

- Termination; I gave a short summary of the interview to assure that I had understood their answers. Afterwards I transcribed the interview and, if I was going to use citations, I sent them an e-mail and asked for permission.

My interview-guide is as follows:

1. Why is supplier/sub-supplier interaction important to you and your company?
 - If the interaction increases what would improve?
 - Why is this important?
2. Can you give one example of once you were satisfied with an interaction with a supplier/sub-supplier? A success story.
 - What was good?
 - What was the outcome?
 - What did you learn?
 - What could have been done differently?
3. Can you give an example of once you were not satisfied with an interaction with a supplier/sub-supplier? An unsuccessful story.
 - What was bad?
 - What was the outcome?
 - What did you learn?
 - What could have been done differently?
4. What is good communication for you?
5. What role does good relationships and trust between suppliers and sub-suppliers play to increase the collaboration? How is the relationship and trust situation today?
6. How do you think a supplier can create a better interaction with sub-suppliers?
7. How do you think a sub-supplier can create a better interaction with suppliers?
8. What do you think are the most important for both parties to do together to get a better interaction?
9. What is the reason that you participate in the seminar?
10. What is the best possible outcome from these types of seminars in your opinion?
11. Do you think these seminars can have an effect in individual and organizational learning?
12. Do you have other suggestions for what the LUP network and VRI can do to increase the outcome (related to their answer of question one)

All interviews were fully transcribed. Two of the interviews were answered in Norwegian and one was answered in English. I asked the questions in English, however two of the key informants said that they would prefer to express themselves in their own language.

The interviews were successful and transcribed without problems. The transcribe work ended up with around 17 pages and almost 10000 words.

3.4 Key Informants

I chose to interview five key informants with different backgrounds and relations to the research question. I found it most reasonable to select one facilitator, one supplier and two sub-suppliers, in addition to an informant that is partly facilitator and partly sub supplier.

(Two sub-suppliers that had participated in the first seminar and one sub-supplier that will participate in the next seminar.) I started by sending e-mails to the facilitators and the supplier, where I introduced myself and explained why I had chosen them as key informants and what I was hoping to achieve from the interviews. The answers from the first three key informants were all very positive and I got all three interviews the next week. I was very excited before the first interview, but he was very open and honest and the first interview was a good experience for me. The next two interviews were exciting and I felt more confident with my questions, as I felt that I was more experienced and capable of doing these types of interviews.

I followed up by sending e-mails to the selected sub-suppliers. I used the same introduction procedure as with the other interviews. Again I got positive feedback and I arranged interviews for the next week. I met the first key informant at the agreed time, but he said that he would prefer answering by e-mail. I did not get any answers so I understood that he actually did not have time to answer my interview questions. I met up for the second interview at the agreed time and place, but it turned out that the key informant had double booked and was in a meeting in another town. (This taught me to call or email the candidates

ahead of time with a reminder.) The next day I called the key informant and we agreed that he would answer my questions by e-mail that same evening. I received the answers as agreed. To get my five interviews, I selected another supplier in order to get an appointment for the last interview. The key informant was positive and we made an appointment for the next day, and the interview was accomplished according to the plan.

3.5 Narrative Knowledge

According to Czarniawska (1999, p. 14) it is claimed that “The narrative mode of knowing consists of organizing one’s experience around the intentionality of human action”. As mentioned earlier in this chapter, I have chosen some story telling questions in order to get some stories from real life situation. The informant’s gave me detailed stories which helped me to understand the concepts of how the networks and relationships are today. It is claimed by Bruner (1986) in Czarniawska (1999, p. 15) that narratives are “especially variable instruments for social negotiation”, which means that organizational stories are important for the researcher to collect in different versions in order to get stories that are more valuable than facts would ever be in organizational life. I chose to ask two narrative questions related to a success-story and one to an unsuccessful story about their relationship with a supplier - sub supplier. In addition I asked, several supplementary questions related to what was good, what was bad, what could have been done differently, what did they learned and what was the outcome.

3.6 Analyze of the Data

To analyze the data from the interviews I made up a table of all the questions from the interview guide and the key elements in the answers that were given in order to get a clear and understanding view. The table made it easier to compare the answers both horizontally and vertically in order to see both similarities and differences for both, the answers and for the

different “groups” of key informants. I found some similarities and some differences, which I present in the result chapter.

3.7 Reliability and Validity

Analyzing the reliability and validity is most common in quantitative studies. Ringdal (2007) argues however that although these concepts in statistical sense are irrelevant in qualitative research, the term is still useful. Reliability in relation to qualitative studies is to look at how the research has been done according to prove possible errors. To avoid errors it is necessary to ask similar questions over time in order to see if the informant’s answers are consistent, however Ringdal (2007) claims that the researcher rarely has time to conduct the same interview numerous times. Fortunately I got more or less the same answers from the different respondents, however they were semi-open questions. According to my interview guide I have used terms that have been understandable for the informants, although I had to give detailed explanations if the key informants were uncertain. Validity is mainly if I have managed to measure what I have wanted to measure (Ringdal, 2007). To validate the measurements I had created 3 different questions about the relationship between supplier - sub supplier, in order to give the informants the opportunity to answer thoroughly from both sides and aspects of the relationship.

4. Results

In this chapter I will present the results from the interviews and the secondary data sources. The findings will be organized according to the four variables regional supplier – sub supplier network, trust, communication and arena.

4.1 Regional supplier – sub supplier network

I started my interview with the question “Why is supplier/sub-supplier interaction important to you and your company?” The facilitators answered supplier development and to meet the customer’s expectations, and if the interaction increases the knowledge and the ability of continuous improvement would increase. While the supplier answered that most important for them and the company was to meet requirements, and if the interaction improved the communication would improve. Sub suppliers focused on interaction and getting information about where the supplier was heading in the future and if that increased the performance, then communication would hopefully be better as well. Related to relationships in networks I asked questions regarding what the supplier and sub suppliers could do together and on their own to increase the interaction. All of the informants mentioned developing closer and earlier, or other forms of communication.

I also asked why the informants participated in the seminar and what they thought the best outcome of these seminars would be, and if it could have an effect on individual and organizational learning. The facilitator and the supplier claimed that building networks and sharing experience and knowledge was their main goal for these kinds of seminars. The supplier also wanted to create a win/win situation for the involved parties and develop each other further. The sub suppliers mentioned that building closer relationships with the suppliers was important, in addition to knowledge sharing. The best possible outcome for such seminars was significantly by everyone, building of relationships and creating networks.

However one of the sub suppliers claimed that work had to be done on changes that could be implemented further.

4.2 Trust

In my interview I asked, “What role does a good relationship and trust between supplier and sub-suppliers play in order to increase collaboration? How is the relationship and trust situation today?” All the respondents significantly mentioned the word trust as very important. One of the sub suppliers had an unsuccessful story about trust, related to differences between Norwegian culture and the culture in other parts of the world. They experienced that every little detail with the international company had to be documented and approved, before they were willing to pay for the work that had been done. Norwegian culture is based on trust, while the international company they were doing business with, always had a suspicious mindset and that the sub supplier just wanted to earn significantly amounts of money.

However one of the facilitators mentioned that the problem might be due to the fact that people quit their jobs more often resulting in frequent replacements, making it difficult to build up good relationships and trust. The sub suppliers claim that the huge number of sub suppliers and the constant price negotiating may lead to reduced trust and that it depends which type of client you are dealing with. They also mentioned that the interaction with the supplier has to increase in order to create a dependency both ways. While the supplier claims, that there has to be openness and transparency to build up a good relationship and trust.

According to the scores from the evaluation form there is most likely to believe that the participants that already knew the other participants and firms before the seminar seems to not know them better after the seminar and did not build more relationships during the seminar, however they may have strengthened the relationship that was already there. On the other hand it seems that the participants that did not know the other participant and firms

before the seminar have learned more about the others and have build new relationships during the seminar.

During the group work, they were able to create relationships and come up with solutions together regarding supplier – sub supplier interaction. The group work situation gave the opportunity to a face-to-face interaction between individuals and further, hopefully improves their communication and the ability to build trust and prolonged relationships. This requires openness and honesty from the individuals and the willingness to share knowledge and build a trusty relationship.

4.3 Communication

By asking the question “What is good communication for you?” to my key informants, I wanted to see if there was the same perception of the word communication for the facilitators, supplier and sub suppliers. The answers all mentioned that open and honest communication is good communication. Several informants also mentioned that face-to-face communication was a good way to communicate, with mutual understanding and involving both parts. Some of the sub suppliers also mentioned that there should be more focus on following up what had been said in order to secure progress. One of the sub suppliers also came up with a success story, which was related to communication were “both parties had an open and honest dialogue about a difficult issue and where both parties listened to each other and tried to understand each others point of view.” In addition to that he said that they had found the best solution to the problem and were not afraid to tell the client when they were struggling. On the other hand he had an unsuccessful story were both parties fought for their arguments and did not show any willingness to listen and understand the other part.

4.4 Arena

The seminar for closer supplier – sub supplier interaction was held on October 17th 2012 at Vestfold University College, with 20 participants. The seminar was located in an arena outside typical environments for the supplier and sub suppliers. The seminar started with a presentation round, then the participants were asked to tell their names, where they work and share their best summer memory.

At the seminar the supplier had a presentation at the beginning with followed up by presentations from three of the sub suppliers. One of the sub suppliers presented the following issue related to the supplier, “When we work with supplies for you, it is problematic to push everything at the same time simultaneously – WE MUST collaborate with you”. However the sub supplier also stated some of the success factors in the relationship with the supplier, which they both agreed on, such as: Communication at all levels, honesty and openness: “I am open and honest with you now, you need to be open to us”, predictability ways, early involvement and competence sharing.

After the presentations and some discussions around the topic and the different issues regarding the seminar, the participants were organized in groups to discuss the goal of the seminar, which was to define possibilities and challenges in dialogue between supplier and sub supplier, share experiences and find solutions. One of the questions was related to further dialogue and improvement, were answers from the three different groups were very interesting and had mostly the same red thread as my own interviews. The ideas and suggestions included close cooperation, sharing success stories, openness, communication, face-to-face meetings and networking.

At the end of the day, the participants were asked to answer an evaluation form, which had 8 respondents regarding the seminar, something that gave some interesting findings. The answers were on a scale from 1-5 where 1 mean completely disagree, 3 meant neither agree

nor disagree and 5 meant completely agree. 0 meant don't know. The first question I wanted to illuminate was "supplier – sub supplier interaction is an important topic for my firm", which scored quite obviously high with 4,88 of maximum 5. It was expected to be high, since they actually were participating at this seminar. The next question I found interesting was "The program was appropriate to increase knowledge about our challenges with supplier – sub supplier interaction." This question got a score of 4, which is relatively high (80%), however this was the first time the seminar was held and there probably was room for improvement. There was also a comment in the free text field, where one participant stated a suggestion for the next seminar; "For the next session we could select some subjects to address and proceed with an implementation plan, in order to take advantage of the momentum generated by such initiative."

Further there were some questions raised regarding the importance of group work in such seminars and the ability of knowledge sharing and learning in the applied method, which is a way to work in groups, something that they were introduced to in this seminar. The score here was also relatively high with 4,50 and 4,38.

The next questions were related to relationships before and after the seminar. The first question was "I knew the other firms and participants well before the seminar" which got a quite high score of 3,50. The answers differed from 1 to 5, which shows a large spread in the answers. This shows that some of the participants knew each other before the seminar, while others did not. The next question was "I know the other firms and participants better after the seminar." This question got the same score of 3,50. Here there were also answers from 1 to 5, which assumingly meant that the participants that already knew the other firms and participants did not know them better after the seminar, but the participants that did not know the firms and participants before, answered that they did know them better after the seminar. The last question were "I built some new relationships during the seminar" with a total score

of 3,50. The participants also gave a score of 4,13 of their overall impression of the seminar. The challenge now will be to take the seminar a step further and also to work hard between the seminars with the discussed topics, so that the learning curves continues.

Furthermore, knowledge sharing and spending more time together was especially mentioned by the sub suppliers, in order to increase the knowledge of each other`s challenges. From the sub supplier`s side, it was claimed that the sub suppliers should take the initiative. One of the sub suppliers had a success story about how they for the two past years had arranged an annual supplier day, something that has been a good experience for both parties. They invited key personnel from the suppliers and discussed opportunities for further collaboration and worked together in workshops where they shared knowledge and built relationships. The outcome of the supplier day was an increase in sales and in their communication. They also worked further with the issues that came up in the workshop and implemented new ways of performance.

The facilitator called for tougher negotiations from the sub suppliers, as it looked like the sub suppliers had too much respect, something that can be understandable because of the size of their suppliers and the bargaining power they have. From the supplier`s side it was mentioned discipline, understanding of requirements and more frequent meetings.

All the informants answered that the seminars absolutely had an effect on individual and organizational learning. Two of the suppliers claimed that individuals are more willing to learn when participating in such a seminar and that it would help the organization to understand mechanisms. The facilitator said that the seminars helped to sensitize individuals and by having discussions in depths would help the organizations to understand more of why they are doing their work in a specific way according to the supplier`s requirements. The supplier claimed the need for more than 1 or 2 meetings, and that the participants needed to grow between the seminars to secure progress.

The aim for this chapter was to present the answers from my interviews with key informants and to look at similarities and possible inequalities between the facilitators, supplier and sub supplier. In the next chapter I will discuss my key findings.

5. Discussion

The findings show that all the informants were positive to building a regional supplier - sub supplier network. The reason for this was their expectations that it would improve the quality and closeness of relationships and communication. Furthermore, it would give possibilities for communication at earlier stages. They also thought that a network would give them opportunities for knowledge sharing, including the sharing of experiences and information about future plans. The combination of closeness and knowledge sharing may create a context for sharing tacit knowledge, because tacit knowledge is crucial for the creation of new knowledge, (Nonaka et al., 2000) sharing of this kind of knowledge is of special interest. Such relationships may also lead to combining ideas in new ways, which according to Porter (1990) may lead to entirely new opportunities.

Because the network they want to build exists of suppliers and sub suppliers from the same region, it may be possible to combine the suppliers as demanding customers, and the competent sub suppliers in a specific set of relationships between organizations, that, according to Porter (1990), have a higher level of economical success. The relationships may also lead to regional collective learning (Keeble (2000), and be used as a coordinating element between the suppliers and sub suppliers when solving problems. Because non-work connections and meetings outside normal work environments, according to Abrams et al. (2003), helps individuals make relationships. The fact that the first seminar started with sharing of non-work related information about summer memories and took place at the university college, may have contributed positive in building relationships. This could also hopefully function as a win-win network.

According to my findings, all the informants wanted to build trust between supplier and sub supplier, something that is claimed by Keeble (2000) as being essential for a co-operation. The trust building process between the supplier and sub supplier should be created

in a network or an arena, like the seminar they attended. They wanted more face-to-face interaction, which requires a dialog between two or more individuals that share the same mindset, visions and common narratives to create cognitive trust (McAllister., 1995; Naphiet & Ghosdal, 1998). However trust may be difficult to build since the replacement of employees in firms have been significant and a statement from Meyerson, Weick, Kramer, and Tyler (1996, p. 181) claims that “*trust does not appear in temporary systems*”.

The participants at the seminar also mentioned that building a relationship between supplier and sub supplier is important, and that in order to create a trustful relationship in a network, there must be people that connect and that the involved parties have to have mutual trust (Gausdal, 2012a, p. 4). If they are able to create mutual trust, there will be an increase in the knowledge-sharing process, both in sharing knowledge and absorbing knowledge (Krogh, 1998). But as the supplier claims, there must be openness, honesty and transparency. On the other hand, the sub-supplier states that constant price negotiations may lead to a lower level of trust, and if the level of trust becomes low, Krogh (1998) claims that individuals become more unavailable with explicit verifiable knowledge.

There was a common thread in all the answers from the interviews regarding that face-to-face meeting with open and honest communication is the best kind of interaction. However, to get a successful communication, the supplier and sub supplier have to follow up the issues and have a verbal interchange of a thought/idea (Littlejohn & Foss, 2008, 2005, p. 3). So with a frequent interaction, the supplier and sub supplier will care more about each other and will understand each others expertise, something that they claimed was an important part in the interviews, which again leads to a higher level of trust (Gausdal, 2012b). If the supplier and sub supplier are able to increase the face-to-face interaction, the interaction will be memorable and meaningful for both (Abrams et al., 2003).

The importance of networking and close collaboration seems to be significant for both the supplier and sub supplier. Assumably it also seems like the networking and relationship building that occurs at the seminar, have been fertile for both existing relationships that have become stronger, and also for new relationships that have been made at the seminar.

According to Krogh et al. (2000) the best way to create personal connections are in small groups. Therefore it is reason to believe that the seminar, because of the group work, was a good opportunity to create relationships and communication. It was claimed among the answers that there has to be consistency and continuity in the seminars in order to get full impact of the seminar, something that is also claimed by (Lave & Wenger, 1991; Wenger, 1998).

In order to increase knowledge sharing in the network, the supplier and sub suppliers have to share space and time, something which may lead to beneficial sharing processes (Nonaka et al., 2000). By having an honest and open face-to-face communication, as both supplier and sub suppliers claimed, in an originating and dialoguing Ba where they share mental models, emotions and feelings between each other, they can share tacit knowledge, where trust is one of the basis of knowledge sharing between individuals (Nonaka et al., 2000). The creation of knowledge is an interaction between micro and macro levels, which help the supplier and sub suppliers, build each other up to a higher level. If the participants are able to develop themselves between the seminars, like the supplier wants, the effect of such seminars will evolve. All the informants agreed that the effect of interpersonal and organizational learning is significant in these seminars, so by supporting their statement, it is claimed that regions that have e.g. demanding customers, competent suppliers and specific relationships between organizations, have a higher level of economical success (Porter, 1990; Porter & Sölvell, 1998; Saxenian, 1994).

This study has of course some limitations, which have to be acknowledged. The findings in this study have to be followed up, e.g. in other settings, and there has to be some stricter testing of the models and the effects. I have concentrated on the theories that I meant was relevant for my study, however there are probably much more theories that I should investigate more.

The research question is "How to improve the collaboration between supplier and sub suppliers to create a competitive advantage for both?" The answer to this question is that the opportunity to meet in an arena created by a third party, would encourage to increase communication and sharing of experience. Group work is an important ingredient in such an arena. In order to increase communication and knowledge sharing, it may lead to a higher level of trust and trust building processes, which again can lead to closer relationships. Closer relationships between supplier and sub supplier will hopefully improve the collaboration. If they manage to create a positive circle of these variables, and continuous improvement of the positive circle in their regional network, it may be a competitive advantage for both.

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