

# DET SAMFUNNSVITENSKAPELIGE FAKULTET, HANDELSHØGSKOLEN VED UIS MØAHOV, MASTERS THESIS

# From Suppliers Marked to Buyers Marked

"How is the buyer-supplier relationship between an oil service company and two of its suppliers affected by today's oil and gas market?"

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#### DET SAMFUNNSVITENSKAPELIGE FAKULTET, HANDELSHØGSKOLEN VED UIS MASTEROPPGAVE

STUDIEPROGRAM: MASTØK	OPPGAVEN ER SKREVET INNEN FØLGENDE SPESIALISERINGSRETNING: STRATEGI OG LEDELSE
	ER OPPGAVEN KONFIDENSIELL? ( <b>NB</b> ! Bruk rødt skjema ved konfidensiell oppgave)
TITTEL: From Suppliers Marked to Buyers Marked	

ENGELSK TITTEL: From Suppliers Marked to Buyers Marked

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OPPGAVEN ER MOTTATT I TO – 2 – INNBUNDNE EKSEMPLARER	
Stavanger,/ 2015	Underskrift administrasjon:

# Acknowledgements

This master's degree thesis is the final stage of the Master of Science, Strategy and management in Economics and Business Administration at UiS Business School, and has been written during the spring of 2015.

During the course of writing this thesis, we have received guidance from Dr. Bjarte Ravndal. Bjarte Ravndal has been our supervisor at UiS Business School. We would like to thank him for valuable advice, discussion and guidance throughout the process of writing this thesis.

Furthermore we would like to thank all in the Sourcing department at CC, our Case Company, for given us much of their valuable time. They have all been very active and helpful. We will dedicate a special thanks to Sourcing Specialist Stig H. who have been a great motivation, organizing interviews, answering questions and providing us with other information and help during this project. We will also like to thank those who participated in the interviews at Supplier 1 and Supplier 2. They all showed a great attitude and willingness towards participating in the research.

Stavanger 08.06.2015

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# Abstract

One of the most significant changes in the paradigm of modern business management is that individual businesses no longer competes as solely autonomous entities, but rather as supply chains. As the importance of the supply side has increased during the last few decades, relationships with suppliers have become increasingly important to buying firms as an increasing number of companies have subscribed to the idea that developing long-term collaboration can significantly improve efficiency of the over all supply chain.

An industry where supply chain management is considered especially important is the Oil and Gas Industry as it involves many contractors and suppliers. This is an industry that is categorized with high uncertainty, technological complexity and long lead times. Thus, an efficient supply chain is a valuable way of securing competitive advantage and securing organizational performance. The oil and gas industry has the past year been influenced by low oil prices and cost savings and both suppliers and buyers are all affected by these challenges.

This research has explored two dyad relationships in the oil service industry. The purpose of this thesis was to investigate the phenomenon of how a buyer-supplier relationship in the oil service industry is affected by today's oil and gas market. This research has explored such a relationship with an oil service company as our case company and two of its suppliers.

For the research design, and explorative case study was chosen, where primary data has mainly been collected through interviews at all three of the participating companies. The relationships have been analyzed by use of several theoretical aspects in supply chain management as well as inter-organizational theories. The findings show that a good buyer-supplier relationship is crucial for companies when faced with challenges in the market. We have concluded that companies, both buyers and suppliers, should invest in maintaining the relationship with their trading partners if they seek a long-term cooperation.

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# **1. Introduction**

Companies today are in general exposed to turbulent and highly demanding markets. Markets are often seen as strongly segmented and globally oriented as customer change their requirements often and in unpredictable ways. Due to customer's demand of different services and products, companies are led to deal with multiple product varieties, customization and segmented markets. As a result, companies need to meet these requirements faster, better and cheaper because of the presence on global competition.

As global competition has increased during the past decade, executives have been encouraged to downsize their organizations, focusing on their "core competencies", and outsource all other "non-core" activities. Due to this trend towards outsourcing, effective supplier management has become increasingly important to firm's competitiveness (Dyer, Cho, & Chu, 1998) (Skjøtt-Larsen, Schary, Mikkola, & Kotzab, 2008). A consequence of this trend has resulted in loss of control over some of the production processes and technological knowledge for the buying firm, which has led to an increased dependency on the supplier base (Gadde et al., 2010). As a consequence, a need for more intense customer-supplier relationships is born. However, these intense relationships are costly, and many firms have therefore heavily reduced their supplier base in order to keep costs down (Ford et al., 2003). One way to keep costs down and at the same time gain competitive advantage is to utilize resources outside the firm, but within its supplier base. Because of this, access to other firm's resources has become as important as the firm's internal resources. In order for the buying' firm to get access to these recourses, it needs to develop intensive relationships with these suppliers (Gadde et al., 2010).

As the importance of the supply side has increased during the last few decades, relationships with suppliers have become increasingly important to buying firms as an increasing number of companies have subscribed to the idea that developing long-term coordination and collaboration can significantly improve efficiency of the overall supply chain (Cai et al. 2013). Supply chain management, hereafter referred to as SCM, is "*a key strategic factor for increasing organizational effectiveness and for better realization of organizational goals such as enhanced competitiveness and increased profitability*" (Gunasekaran et al. 2001, p. 71).

According to Copra & Meindl (2010), the goal of a supply chain strategy is to balance between the responsiveness and efficiency on order to fit the company's competitive strategy.

An industry where supply chain management is very important is the Oil and Gas industry. This is an industry that is categorized with high uncertainty, high cost levels, technological complexity and long lead-times (Olsen, 2005). Olsen argues that in this industry SCM is especially important as it involves many contractors and suppliers. In the early and mid-1990's the world oil price reached rock-bottom level. During this period the Norwegian oil and gas industry experienced lower profitability. Due to this, the industry were challenged to investigate the organization of exploration and production in order to come up with new solutions that could make the industry less vulnerable in periods of low oil prices (ibid). This is similar to the situation that has occurred in the oil and gas industry today.

# **1.1 Oil and Gas Industry**

Petroleum is generally defined as hydrocarbons that occur naturally in certain geological formations in solid, liquid or gaseous state. Previously, the term petroleum only used for hydrocarbons in the liquid state. Petroleum is the world's leading industries, it is one of the largest in sales and it concerns all countries (Gundersen & Lundberg, 2014). Every day our life's are touched in countless ways by the oil and natural gas industry. Together, they supply more than 60 percent of our nation's energy (Institute).

With more than 40 years of petroleum activities, Norway has a highly skilled and internationally competitive petroleum related service and supply industry (Government.no, 2014). Rough weather conditions in the North Sea and demanding operators are among the factors that have contributed to the development of Norway's technologically world-leading petroleum service and supply industry. Service and supply industry is Norway's second largest industry after the oil and gas sales with total revenue of 524 billion in 2013. The service and supply industry includes companies that supply oil and gas related products or services to the upstream oil and gas industry, either directly to oil companies or to other service and supply companies. Across the entire value chain there is more than 1250 service and supply companies. In many ways, the Stavanger region is a reflection of Norway as a whole. Stavanger employs the most people within oil and gas and represents a broad range of

products and services for upstream activities (ibid). "Overall, the petroleum resources on the Norwegian Continental Shelf have laid the foundation for a highly competent and internationally competitive oil and gas supply and service industry. It is a great national advantage having such an outstanding, world class industry." (Government.no, 2014)

Oil prices are absolutely fundamental to all oil operations, whether it is Norway or other countries. If the oil price is not high enough, it will not respond to develop oil fields and producing oil. Norwegian oil industry is particularly vulnerable to change in oil prices because it required such large investments to produce oil offshore. (Qvale, 2015). According to Olson et al. (2005) two major problems for the North sea oil and gas industry compared to on-shore production are high cost levels and long lead-time from exploration to production. When oil prices falls it is important that the industry work systematically to establish costeffective solutions (Olson et al., 2005). May last year, no one predicted layoffs in thousands and spending cut worldwide. Few months later got started on a humble drop in oil prices, which did not stop before oil prices were halved. The past year has been a mildly troublesome year for oil producers worldwide. In July 2014, the prices of a barrel of North Sea oil at \$ 110, in January 2015 the price were down to \$ 50 a barrel (Seglem, 2015). These difficult times have led to cost cutting measures for both the large oil companies as well as the service companies and suppliers. As a result, thousands of workplaces have been cut and projects are put on hold. As the projects are put on hold, the workload has decreased and the competitions for contracts are high.

# 1.2 Research problem

As the oil and gas industry now has gone from a "golden age" with abundance of work and wealth, to a dramatic fall in oil prices worldwide and lots of projects on hold, the companies operating in this industry faces a lot of challenges. In these vulnerable times, cost savings are in general priority one, thus buyers will try to negotiate prices with their suppliers. Due to this the relationship with the suppliers are tested, as the suppliers have to act in accordance to the market and be willing to adapt. In order to sustain competitive in the market, organizations need to increasingly be able to meet the customers demand properly; on time, with correct prices and quality that is agreed upon. In the supply chain, buyer-supplier relationship is one of the most important elements of supply chain integration as the key for business success is to be able to establish and managing effective relationships at every link in the supply chain

(Ganesan, 1994). Maloni and Benton (2000) found that strong buyer-supplier relationships have a significant positive effect on manufacturer performance, supplier performance and performance of the entire supply chain (Maloni M., 2000). Thus, in today's oil and gas market where performance and costs are crucial in order to stay competitive, strong buyer-supplier relationships are very important. Bearing in mind that supply chain management is especially important in the oil and gas industry as it involves many contractors and suppliers, we sough to investigate the relationship between an oil service company and its suppliers. The aim for this paper was initially to make concrete recommendations for how the case company could improve their current relationship with the chosen suppliers. Our hope was that in the long run this could positively affect the financial results for both the case company and its suppliers, as they are increasingly able to meet the customers demand properly; on time, correct price and quality that is agreed upon. However, due to the recent development in the oil and gas market, and conversation with the case company, we found that buyer-supplier relationships is an interesting topic, but recommendation for improvements may not be the right priority at this point due to the market situation.

As projects are put on hold and the workload are decreased, companies are forced to reduce costs and enter a "savings mode" in order to sustain competitive. Due to this, relationships between buyers and suppliers are tested as the competition for contracts are much harder. If the marked had not changed the past year, the original purpose of the thesis to come up with concrete recommendations would have been more interesting because the propositions we would suggest could have made a difference in the relationship as both companies would be willing to invest in these improvements. But as the situation in the oil and gas market at this point is somewhat different than it was a year ago, we found it more interesting to look at how or if these relationships have been affected by the market. Thus, the purpose of this thesis is to investigate two dynamic buyer-supplier relationships in the oil service industry. Our goal is to investigate the phenomenon of how a buyer-supplier relationship is affected by the oil and gas market to investigate how CC, an oil service company, and its relationship with two suppliers were affected by today's oil and gas market. Thus, our research question is as follows:

# "How is the buyer-supplier relationship between an oil service company and two of its suppliers affected by today's oil and gas market?"

To answer our main research question we found it useful to create three sub questions:

- 1. How is the current relationship between CC and the supplier?
- 2. How is the current market situation?
- 3. Is the relationship affected by the current market situation?

As we want to investigate the phenomenon of how two buyer-supplier relationships in the oil and gas industry are affected by the market, we have used CC, an oil service company as our case company. An oil service company, as our case company, provides products to their customers who often are composed by different components from several suppliers. For example a supplier might supply the company with vault parts, while another supplier delivers the bolts that are used to assemble the parts together. They are therefore dependent on efficient supply chain that can deliver as promised and meet the need of the industry to be able to deliver the final products to their customers. This emphasizes factors such as the need for efficient planning, trust, communication and information sharing within the buyer-supplier relationship. According to Ambrose et al. (2008) various dimensions can be viewed as key features in a relationship; which is trust, commitment, power, dependence and communication (Ambrose, Marshall, Fynes, & Lynch, 2008). In this thesis we will explore each of these key features within the two dyad relationships, which lead us to the following model for our thesis:



Figure: 1-1: Theoretical framework

This theoretical framework illustrates the relationship between the case company and its two suppliers. The two individual suppliers are connected to CC through the buyer supplier relationship circle. Within the buyer supplier circle, the key components trust, commitment, power, dependency and communication are explored. Finally we will explore how the relationship is affected by the market they operate in.

Following is a short introduction of the case company and the two suppliers:

# 1.3 Case company - CC

Our case company is a world leading oil Service Company that operates within advanced technology equipment and services for all segments of the oil and gas industry, as well as in other unrelated industries. In the oil industry they have more than 37 000 employees in more than 100 countries supporting customers across the industry. In the Norwegian division of the Case Company there is about 750 employees. Most of the activity within service and after sales is associated base in the Stavanger region, which is the focus of our research. This activity also includes testing and implantation of new technology for increased durability and improved recovery. Including administration, CC has locations in Stavanger and Bergen, with a total of nearly 500 employees who work on land and offshore.

# 1.4 Suppliers of the case company

In this research we choose two suppliers to participate in the research. These suppliers are chosen in collaboration with our focal firm, CC and based on CCs spend report for year 2014. These suppliers are hereafter referred to as Supplier 1 (S1) and Supplier 2 (S2).

# 1.4.1 Supplier 1 – S1

With their 35 years of experience in repair, maintenance and new production, Supplier 1 is among the nation's leading mechanical workshops in manufacturing and maintenance of mechanical equipment for the oil and gas industry. Since 1980, S1 has been a quality provider and a preferred expertise in machining, welding and mechanical services. As a total supplier, they offer a variety of solutions where service and quality is high throughout the process. They specialize in time-critical missions and mechanical workshop in the Northern Europe with the highest capacity of repairing well and drilling equipment.

## 1.4.2 Supplier 2 – S2

Supplier 2 is a small supplier with 26 employees. They have a sales office in Porsgrunn with three employees and the rest divided between their two offices in Forus, Stavanger. S2 is an authorized sales and service center in Norway for a major US company. This company is based in Cleveland and Ohio. S2 has been an actor for this company since 1965 and a supplier for Ekofisk since 1970. They operate in several industries, but oil and gas are the largest. They deliver an expanding range of the highest quality fluid system products and solutions.

In the next chapter relevant theories will be explored and various authors 'findings and propositions introduced. The focus on "buyer-supplier relationships" involves areas such as trust, communication, commitment, dependency and power in buyer-supplier relationships. In addition, we will also explore a set of relevant frameworks by various authors, which we will use in our analysis. In the following chapter we will explore the methodology; how we seek to answer the research questions, what method to use etc. The next chapter is the analysis chapter. Here we reveal the current buyer-supplier relationship based on the interviews we conducted, theories and relevant frameworks introduced in the theory chapter. Second; analysis, which explores how the current market situation is and if the relationships are affected by the market. The final section of this research is discussion and conclusion, where we seek to summarize the research, discuss our findings and finally answer the research question. In addition, in this section we will propose topics and implications for future research.

In the following section we will present the main focus of our paper; *buyer-supplier relationship*.

# 2. Literature review

The objective of the theoretical part of this master thesis is to provide the foundation for analyzing buyer-supplier relationships with regard to supplier handling in CC. This chapter will present general definitions of relevant concepts and theories about supply chain management and buyer-supplier relationships.

# 2.1 Supply chain management

Management of multiple relationships across the supply chain is often referred to as supply chain management. Supply chain management, (hereafter referred to as SCM), has become a popular topic over the past years and has since the early 1990s received increasing attention from academicians, consultants and business managers. Starting from the concept of internal logistics, Lambert & Cooper (2000) states that it has now expanded to include "the management of multiple relationships across the supply chain". Competition has shifted from individual actors competing against each other, towards a more closely coordinated supply chain or network competing against other supply chains or networks. (Lambert & Cooper, 2000). Skjøtt-Larsen et al. (2008) states that "as organizations today transform from hierarchies towards markets, are engaging in collaborating networks, the management of supply chains refers to a sort of inter-organizational relationship management, with a goal of an overall improvement of the profitability of the involved parties" (Skjøtt-Larsen, Schary, Mikkola, & Kotzab, 2008). Mentzer (2001) argues that some drivers for the popularity of the concept may be traced to trends in global sourcing with an emphasis on quality-based competition, on time and greater environmental uncertainty.

The globalization of supply has forced companies to look for more and more effective ways to coordinate the flow of materials into and out of the company. An orientation toward closer relationships with suppliers can be key to such coordination (Mentzer, et al., 2001). According to Lambert, Cooper and Pagh (1998) one of the most significant paradigm shifts of modern business management is that individual businesses no longer compete as solely autonomous entities, but rather as supply chains. The supply chain is not a chain of businesses with one-to-one, business- to business relationship, but rather a network of businesses and

relationships. They argue that management needs to shift focus from *"managing individual functions to integrating activities into key supply chain processes"*, in order to develop successful supply chain management. (Lambert, Cooper, & Pagh, 1998). Skjøtt-Larsen et al. (2008) express the importance of understanding that no firm alone can accomplish the complete process of meeting the demand of the market on the face of intense competition, evolving customer requirements and changing technologies.

SCM has been defined by several author's through the years, and in reviewing available literature, it has become clear that there does not exist one common definition of SCM. In his research Janvier-James (2012) summarizes definitions of SCM and refers to the Council of Supply Chain Management Professionals (2009), who defines SMC as "the designing and management of all activities involved in sourcing and purchasing, transformation, as well as all logistics management activities". (Janvier-James, 2012) Lambert and Cooper (2000) defines SCM as "the integration of key business processes from end user through original suppliers that provides products, services, and information that add value for customers and other stakeholders". Based on their research Mentzer et al. (2001) propose a unified definition that could be used to easily explain SCM. The authors defined SMC as "the systematic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purpose of improving the long-term performance of the individual companies and the supply chain as a whole" (Mentzer, et al., 2001).

#### **Managing Supply Chains**

To manage the entire supply chain is an impossible task, and literature on SCM suggests numerous possible components that must receive managerial attention when managing supply relations. Skjøtt-Larsen et al. (2008) express that the key to success in managing supply chains is collaboration with other organizations in the supply chain. They distinguish three SCM challenges, which is; 1) to define core and establish the boundaries of the firm, 2) to create the most effective governance mechanisms and 3) to develop the most appropriate relationships with partners. We will in this thesis concentrate primarily on the third: to develop the most appropriate relationships with partners.

# 2.2 Buyer-Supplier Relationships

In the supply chain, buyer-supplier relationship is one of the most important elements of supply chain integration. The key for business success is to be able to establish and managing effective relationships at every link in the supply chain (Ganesan, 1994). Maloni and Benton (2000) found that strong buyer-supplier relationships have a significant positive effect on supplier and manufacturer performance and performance of the entire supply chain. There has been an increased tendency to use strategies such as Supplier Delegation and Supplier Tiering, which have resulted in big changes in the nature of buyer-supplier relationships. The change has gone from widespread range of suppliers, to fewer, closer relationships with key suppliers. Because of this change, the role of buyer supplier relationships plays an even greater importance (Cousins P., 2002).

According to Cousins (2012) a relationship is a process rather than an entity, and the unit of analysis should be focused on the product, service or the commodity level rather than at firm level. This means in short that one should not conclude that a relationship is constant, but instead dynamic, in other words – changing over time. Cousins (2002) presented a model of how to manage long-term relationships, and encourages firms to identify what relationship it is currently in, and what relationship it requires. The firm can then decide to change the current relationship or not change anything and leave it as it is. Cousins (2002) categorize the relationships based on the two factors; level of dependency and level of certainty. Buyer and supplier relationship can be divided into two major types: "adversarial competitive" and "collaborative partnership". Shapiro (1986) claims that the main goal of the traditional adversarial approach is to minimize the price of purchase goods and services. In order to obtain a higher bargaining position compared to other suppliers, buyer keeps a large number of suppliers and makes only short-term contracts. Mayhow (1985) suggested that buyers should consider more about performance criteria, such as delivery and quality for the relationship between buyer and supplier rather than only consider price-based criteria. The competitive advantage the Japanese gained, came from "viewing the supplier as coproducers, working with fewer suppliers per customer and customer per supplier, developing long-term relationships, managing close interaction among all functions, sharing physical proximity, and blanket contracts" (Cousins P., 2002). Morgan (1987) observed a tendency that customers often shift from an arms-length relationship (a number of competing suppliers) to closer collaborative relationship.

According to Uzzi (1996), firms that connect to their networks with embedded ties have greater chances of survival than firms that connect to their network with arms-length ties. This is supported by The Network Based theory, which emphasizes the need for developing long-term relationships based on trust and mutual adaption of routines and systems through exchange processes. Trust, commitment and willingness to share risks in long-term cooperation are required in order to move forward in a collaborative relationship. Especially for effective collaboration, good communication is needed at all levels and information should be shared in an open way and continuous inter-and intra improvements are needed (Robert M. Morgan, 1994). According to Ambrose et al. (2008) various dimensions can be viewed as key features in a relationship; which is trust, satisfaction, commitment, relationship maturity, power, dependence and communication (Ambrose, Marshall, Fynes, & Lynch, 2008).

# 2.2.1 Liu et al.'s (2010) buyer-supplier relationship quality matrix:

Liu et al. (2010) suggests that key drivers for quality in relationships are mutual trust and commitment amongst the buyer and supplier. To explore how the relationship quality can reflect the involved actor's level of cooperation and adaption the authors developed a matrix of buyer-supplier relationship based on the level of trust and commitment. Based on the level of these two variables (high or low), a relationship is categorized into a box. The matrix is used to explore changes in use of selected control mechanisms, which include coercive power, non-coercive power, contracts and relational norms (ibid.). Below is Liu et al.'s (2010) theoretical model of relationship, which is based on the level of trust and commitment present in the relationship:



Figure 2-1: Relationship matrix, Source; Liu et al. (2010)

#### *Type 1* (High level trust and high level commitment)

This relationship is referred to as "buddy" and means both parties in an exchange relationship have close ties, a willingness to sacrifice their own interests for commitment to long-term cooperation and common interest (Liu et al. 2010) Liu et al. (2010) describe type 1 as an cooperative relationship that many partners seek.

#### Type 2 (high trust and low commitment)

This relationship is referred to as a "relier". In this relationship both parties may be willing to sacrifice their own interests for long-term common interests to some extent, but for some reason they are not willing to commit to long-term cooperation (Liu et al. 2010). Liu et al. (2010) state that this type of relationship has great potential for realizing the transformation from "relier" type to "buddy" type over time as mutual trust established between the parties over time could generate mutual commitment.

#### *Type 3* (low trust and low commitment)

This is an "arm's-length" relationship. Arm's-length means that both parties in an exchange relationship will have low levels of mutual trust and commitment. Parties in this type of relationships care little about their partner's feelings, are unwilling to sacrifice their own

interests, and don's wish for long-term cooperation (Liu et al. 2010). Liu et al. (2010) describes "arm's-length" relationship as the worst type of relationship and often the reason why cooperation between partners fail.

#### *Type 4* (low trust and high commitment)

This relationship is referred to as an "initiative". An initiative means both parties in an exchange relationship will be willing to maintain long-term relationships, but mutual trust between them has not been established (Liu et al. 2010). Lie et al. (2010) argue that although both parties want to maintain the relationship and continue the cooperation due to business reasons, this can be difficult because of the lack of mutual trust and the potential for conflicts between them.

Control mechanisms is used as a basic relationship management tool which can minimize the partner's opportunism, protect specific investments, increase channel member's satisfaction and performance an improve relationship quality (Liu et al. 2010). By using the appropriate control mechanisms for the correct type of relationship will likely lead to increase channel satisfaction and performance as well as improved quality in the relationship. Liu et al. (2010) have used coercive- and non-coercive power, contracts and relational norms as control mechanisms. Power execution, is expressed by Liu et al. (2010) as "one party's use of its status or power to control the other party's activities". Power execution can be divided into the use of coercive power; which directly affects members behavior, mainly thorough punishment, reward and law, and non-coercive power; which indirectly affects members behavior by motivation, convictions, and changing business objective, viewpoints through information, special skills and so on (Brown et al. 1995, and Kim, 2000 in Liu et al. 2010).

The use of high level of coercive power will increase conflict, demotivate cooperation, decrease satisfaction among involved actors, as well as decrease the perception of quality in the relationship (Liu et al. 2010). Liu et al. 's (2010) study argues that the use of coercive power is mainly found in "arm's-length" and "initiative" relationships. This type of control mechanism is rarely used, as the use of coercive power might lead to conflict and block future cooperative relationships. Non-coercive power on the other hand, fosters satisfaction and motivation from cooperation among the involved actors, as well as it fosters information and knowledge sharing, which will lead to a higher degree of communication and understanding (ibid.). Liu et al. (2010) argue though, that use of non-coercive power in arm's-length

relationship where mutual trust and commitment is low or absent, may lead to opportunistic behavior by the partners

*Contract* is another control mechanism that is generally conceptualized as agreements among members that specify the respective responsibilities and information for future exchange (Weitz & Jap, 1995; Lusch & Brown, 1996 in Liu et al. 2010), as well as protecting specific assets against opportunistic behavior (Williamson, 1985). If there is low level of trust between partners contracts are appropriate to use in solving disagreements. However, using contracts in a situation of high level of mutual trust might have negative impact on the partners because it can bread the feeling of distrust (Buvik & Reve, 2001; Poppo & Zenger, 2002, in Liu et al. 2010).

*Relational norms* is the last control mechanism in Liu et al.'s (2010) quality relationship matrix. Relational norms are a series of common hidden rules, which include both parties' expectations of behaviors and attitude in cooperation activities for achieving their common and separate goals (Weitz & Jap, 1995; Heide & John, 1992 in Liu et al. 2010). Jap & Gensan (2000) argue that exchange partners with high trust and commitment are more willing to use relational norms to manage exchange relationships (in Liu et al. 2010).

Lui et al.'s (2010) study argue that partners will always use a lower level of coercive power regardless of relationship quality. Liu et al. (2010) explains this is because use of coercive power might lead to conflict and block future cooperative relationships, as well as use of coercive power depends on having such power. Second they argue that partners will always rely heavily on contracts to govern an exchange relationship, even when the quality of the relationship is continuously improving. Contracts as a control method are widely used among various types of relationships, as both parties tend for find this control effect acceptable (ibid.). Liu et al.'s (2010) study also found that as exchange relationship duality improves, partners control mechanisms used for governing the exchange relationship become more flexible, harmonious and friendly. These findings indicate that partners looking for economic benefits will mainly rely on formal control mechanisms, that is contracts other than coercive power, to govern an exchange relationship, and that informal control mechanisms, such as relational norms and non-coercive power, will function as complementarities (Liu et al., 2010) As the level of relationship quality improves, the extent of the use of non-coercive

power and relational norms increases. Whatever the level of relationship quality is, informal control mechanisms cannot replace formal control mechanisms (Liu, Li, & Zhang, 2010).

## 2.2.2 Trust

Many authors have emphasized the importance of trust in a buyer-supplier relationship as several studies have shown that successful collaborative relationships rely on relational forms of exchange characterized by high level of trust (Cai et al., 2013; Sako, 1991; Hill 1995; Liker & Choi, 2004). Dyer and Chu (2000) defines trust as *"one party's confidence that the other party in the exchange relationship will not exploit its vulnerabilities"*, which puts emphasis on confidence on the other party. Cousins (2002) argue that certainty is in close relation to trust, as uncertainty is the same as the probability of success or failure of a given event (risk). The author further argue that risk and trust appear to be the same thing, just in different ends of the spectrum, with risk tending to be negative and trust to be positive. Risk is therefore seen as unpredictable and unsafe, while trust is predictable and safe (ibid).

Several scholars argue that trust can be conceptualized as a substitute for various governance mechanisms (Williamson, 1985; Sako, 1997). The Transaction Cost Theory suggests that the notion of governance structure is closely linked to the idea of "safeguards" against opportunistic behavior (Williamson, 1979). According to Sako (1997) such safeguards become unnecessary if actors have an internalized moral norm of behaving in a trustworthy manner. Further the author argued that self-enforcing safeguards such as i.e. relational trust are more effective and less costly means of safeguarding transactions. Williamson (1985) argue that trust is a social norm, which can lessen the need to use hierarchy to attenuate opportunism (Williamson, 1985 in Sako 1997). In western economy, contracts has been viewed as the primary means for safeguarding transactions, however alternative means such as self-enforcing agreements include informal safeguards such as relational or goodwill trust (Dore, 1983 in Dyer 1998).

Sako (1997) distinguished between three types of trust; *contractual trust* (will the other party carry out its contractual agreements?), *competence trust* (is the other party capable of doing what it says it will do?), and *goodwill trust* (will the other party make an open-ended

commitment to take initiatives for mutual benefit while refraining from unfair advantage taking?). Contractual trust rests on a shared moral norm of honesty and promise keeping. Competence trust requires shared understanding of professional conduct and technical and managerial standards. Goodwill trust can only exist when there is consensus on the principle of fairness (Sako, 1997).

Although many empirical studies present a strong support for a positive relationship between trust, commitment and relationship continuity, there are some scholars that argue that this is not always the case. According to Grayson & Ambler (1999) some buyers in mature relationships gradually develop the belief that a supplier is taking advantage of the trust and is acting opportunistically. This can happen when one of the exchange parties fails to invest in the relationship, by showing a lack of adaptive behavior and commitment (Grayson & Ambler in Caniels et al. 2008). Also authors argue that too much trust will either reduce the commitment of one party to monitor the other or increase the opportunism of one partner (Jeffries & Reed, 2000).

According to Zineldin & Johnsson (2000), trust and commitment are results of successful relationship marketing activities, behavior, action and counteraction mechanisms. These mechanisms include communication, information exchange, adaption willingness, cooperation and satisfaction. The authors further argue that the level of trust in a relationship may vary widely, as the behavior of the two companies will not always be predictable, or even make any sense when set against their stated individual aims, individual best interest or the good of their relationship. According to the authors satisfaction is an important variable for trust. The results from their research found that a buyer that is satisfied with a supplier also trusts the supplier to a greater extent. However values about behaviors, goals and policies and formal and informal sharing of meaningful and timely information between the partners were also significant variables for trust. (Zineldin & Johnson, 2000)

## 2.2.3 Commitment

Commitment is defined as the belief that trading partners are willing to devote energy to sustain the relationship (Dion et al., 1992). Morgan & Hunt (1994) stated that commitment is a central aspect for the supply relationship success, as they encourage maintaining the current

relationship investments by cooperation. The author's states that trust influences relationship commitment, and define relationship commitment as *"the willingness to invest financial, physical or relationship-based resources in a relationship"*. According to Anderson and Weitz (1991), the commitment of each supply chain link is based on its commitment perception regarding the other members. In this way, buyer's commitment positively influences supplier's commitment. (Anderson & Weitz, 1992)

There are distinguished between three dimensions of commitment; instrumental commitment, where an actor is constrained by the costs and inconveniences of leaving the current collaboration (Gilliland and Bello, 2002, in Brown et al., 1995); normative commitment, which is based on the partners'' value in the collaboration; and affective commitment which relates to a partners identification and involvement with the others (Brown, Lusch, & Nicholson, 1995). Liu et al.'s (2010) interpretation of commitment entails satisfaction, long-term commitment and perspective and communication. The authors argue that in order to sustain a long-term relationship, quality is essential, and key drivers for quality in the relationship is mutual trust and commitment among the parties in the relationship.

#### **2.2.4 Communication**

Good communication can be viewed as a way to improve trust and commitment, and is important when evaluating an organization's relationship, as it is critical for an efficient organization and supply chain (Burger et al. 2006, in Ambrose et al. 2008). Prahinski & Benton (2004) distinguish between content, medium and feedback. Content is defined as the message that is transferred. The content is then subcategorized into the type of information exchange and the type of influence strategy embedded in the exchange (direct or indirect influence). Communication medium refers to the method used to transmit information. The medium can be operationalized as the personal, commercial or formal nature of the communication (Mohr & Nevin, 1990) and can be divided into richness or formality classification schemes (Prahinski & Benton, 2004). Media richness is defined as "*the potential for information media to transfer knowledge between parties to reduce ambiguity*" (Daft & Lengel, 1984 in Ambrose et al. 2008). In supply chains, the critical communication is predominantly horizontal, and an important question is whether it is one-way or bi-directional. Where information is bi-directional, this enhances the richness of the communication (Ambrose et al. 2008). Prahinski & Benton (2004) defines medium richness as "the number of cues that can be used by the receiver to interpret the message," where face-to-face communication is the riches medium and electronic data transfer is considered the least rich. Communication formality is defined as "the degree to which the inter-organizational communication is organized through structured rules and fixed procedures" (ibid). Communication feedback is referred to as the two-way communication between two firms (ibid). Prahinski & Benton (2004) define collaborative communication strategy as a communication effort that emphasizes indirect influence strategy, formality and feedback in unison. The authors emphasizes that feedback and communication formality established between the buying firm and the supplier positively influences the buyer-supplier relationship. The authors suggests that the buying firm establishes an environment conductive to an open dialogue regarding the supplier evaluation and listen to the supplier's suggestion and feedback for performance improvements. The authors further argue that the supplier will then perceive the buying firm to be committed to the relationship and that evidence suggests that suppliers are committed to the buying firm when they perceive the buying firm to be cooperative and committed to them (Prahinski & Benton, 2004).

According to Eckerd & Hill (2012), increased information sharing between the supplier- and buying firm builds trust in such manner that unethical behaviors are discouraged. The authors further suggests that high levels of buyer-supplier information exchange may lead the supplier to believe that the buying firm has greater commitment to the relationship, as well as increased levels of supplier satisfaction. Information sharing between buyer and supplier may provide a signal of "good faith" that their motives and intentions can be trusted. It is through information sharing that supply chain partners develop trust in one another, and come to believe their partner will not violate the social contract by behaving unethically or opportunistically (Eckerd & Hill, 2012). Dyer & Chu (2003) supports this as they argue that by sharing information, the buyer and supplier firms signal their trustworthiness, as well as demonstrate trust in their partners to behave fairly (Dyer & Chu, The determinants of trust in supplier-automaker relationships in the U.S.; Japan and Korea, 2000). Doney & Cannon (1997) argue that communication and information sharing between buyer and supplier firms is essential for building long-term relationships (in Eckerd & Hill, 2012).

Eckerd & Hill (2012) argue that sharing of information to partners could be a risk-taking behavior because organizations might face the risk of their partners abusing the shared information and knowledge. From a buyer's perspective, a firm might be more willing to share information with its suppliers if it trusts its suppliers. Alternatively, a buyer may share information with its suppliers because the suppliers control some critical or inimitable resources uniquely needed by the buyer. The dependency or power structure among the exchange partners drives exchange performance. Because of this, issues of trust and power among the participants are critical (Cai, Goh, Souza, & Li, 2013).

#### 2.2.5 Dependence

According to the Resource Dependency Theory, no firm is self-sufficient and firms will always depend, to varying degrees, on their trading partners (Cai, Goh, Souza, & Li, 2013). Cox (1999) claims that power is derived from dependency (Cox, 1999). Caniels (2007) support this as he argues that power and dependence are closely related, and that the buyer's dependence on the supplier is a source of power for the supplier, and vice versa. The author further argues that two factors determine dependence; the necessity of a resource to the firm, and the degree in which alternative providers of this resource are at hand (Caniels & Gelderman, 2007). Belaya et al. (2009) argues that sociologists have long conceptualized power in terms of the concept dependence. Furthermore, Emerson (1962) proposed an important concept of power-dependence in social exchange relations. If an organization is more dependent on its exchange partner, the resulting net-positive dependence on the partner, or the partner's dependence advantage, was constructed as the source of partner's power. Similarly, if an organization's net dependence was negative, then the actor was believed to have the dependence advantage and thus to be in a position of relative power (Emerson, 1962).

Pfeffer and Salanick (1978) state that the dependence imbalance is the determinant of the vulnerability of organizations. The authors further emphasizes that dependence "*exists* whenever one actor does not entirely control all of the conditions necessary for the achievement of an action or for obtaining the outcome desired from the action". Because organizations are unique and require different amount of critical resources, the level of

dependence will vary across organizations in the exchange relationship (Pfeffer & Salanik, 1978).

The resource dependency theory specifies the basis of the created dependencies among actors. The dependency represents a situation in which firms that own or control valuable or scarce resources hold power over firms seeking those resources. When firms are confronted with external dependencies they will try to establish inter-organizational arrangements as a strategic response to uncertainty and inter-firm dependence (Stern and Reve, 1980 in Belaya et al. 2009). The theory assumes that an organization's vulnerability to extra-organizational influences is partly determined by the level of dependence on certain types of exchanges for its operation with the external environment (Jacobs, 1974). Thus this theory emphasizes the importance of the external environment and characterizes organizations as open-system structures that seek to manage their levels of dependence on the environment. Resource dependency assumes two interrelated reasons for the formation of exchange relations occurring amongst organizations: specialization and scarcity. Most organizations perform specialized functions, but few cannot access all necessary resources to fulfill the specialization. Second, scarcities on the availability of resources make organizations seek potential partners to exchange resources (Cook, 1977 in Belaya et al., 2009).

#### **2.2.6 Power**

Cox (1999) defines power in supply chain as "the ability of a firm to own and control critical assets in markets and supply chains that allow it to sustain its ability to appropriate and accumulate value for itself by constantly leveraging its customers, competitors and suppliers". Weber (1947) defined power as a social phenomenon stating that power is "the probability, in a social relationship, to impose one's own will even against resistance regardless of the basis on which this probability rests" (Weber, 1947, in Belaya et al. 2009).

According to Belaya et al. (2009) power can be used to influence and/or control the behaviors of the other party. Power plays a significant role in the supply chain, and the different sources of power have different impact on inter-firms relationships and the performance of the entire supply chain (Maloni & Benton, 2000). Some scholars assert that power negates cooperation

and is considered the opposite of what it takes for a relationship to function (Naude and Butte, 2000; Kumar et al. 1998, in Belaya et al. 2009). However some argue that power can be seen as a mechanism for achieving coordination and cooperation amongst channel members (Stern and El-Ansary 1996 in Belaya et al. 2009).

Many authors that have studied power agree to that there seems to be a problem in defining the concept correctly. Bierstedt (1950) states that the entire lexicon of sociological concepts none is more troublesome than the concept of power (Bierstedt, 1950). Sociologists, psychologists, political scientists and economists have spent a lot of effort to clarify the meaning of the concept of power. The discussion of power from the economic point of view is reflected by the transaction cost theory which rest on the basic premise to find the most appropriate governance form in order to keep transaction cost between firms at the lowest possible (Arnold, 2000). According to Williamson (1979) transaction cost theory, views governance as the means to infuse order in an exchange relationship and by this mitigate conflict and realize mutual gains for those involved. Each partner is motivated by the self-interest of retaining an advantage for themselves and that a situation of power must be the ideal position to be in.

The theory of competitive strategy views power in terms of suppliers and buyer power driven by the number of major customers of a supplier's component, a suppliers market share of a given component, the number of suppliers from which a buyer purchases a particular component, the number of potential suppliers for a given component, and the amount of revenue a supplier generates from a single buyer, the uniqueness of the product or service, as well as the cost of switching from one product to another (Porter, 2008).

Belaya et al. (2009) argue that the consequences of power are captured differently and conclude that they can be divided into positive and negative ones implying coercive and non-coercive sides of power where non-coercive sources of power is operationalized as rewards, or assistances, and coercive as punishments (Belaya & Hanf, 2009). According to Maloni & Benton (2000) coercive power leads to an undesirable cooperative relationship as the use of such power may have a negative effect in the sense that the weaker parties may lose interest in the relationship. Belaya et al. (2009) argue that power and coercion are different by their nature and that power can be used to influence by leaving the power targets a choice of attractive alternatives, whereas coercion removes any freedom of choice. The authors further

state that "non-coercive power provides numerous relational advantages, including the ability to overcome lack of consensus and provide legitimacy and stability to relationships" (ibid.). This is supported by Frazier & Summers (1984) as they argue that non-coercive power does not include any aggressive elements, which may produce friction in the relationship, but fosters a high level of agreement between the interacting parties (Frazier & Summers, 1984, in Hoppner et al. 2014) (Hoppner, Griffith, & Yeo, 2014).

Within a buyer-supplier relationship, there is a power balance; either the parties are equally powerful, or one has more power over the other. Lawler & Yoon (1993) claims that power imbalance in a relationship reduce the frequency of exchange and thus hinder conflict resolution. Belaya et al. (2009) supports this as they state that; "*power imbalance creates opportunities for more powerful actors to act opportunistically, which may dissolve relational elements necessary for the development of effective supply chain relationships*". However Corsten & Kumar (2005) claims that power should not always bee seen in a negative light for the weaker party, as power imbalance is not a barrier to the formation of close and workable relationships, but can foster greater economic performance and develop capabilities in collaborative relationships with powerful buyers (Corsten & Kumar, 2005 in Belaya et al. 2009).

# 2.3 Cox (2001) power matrix

Cox's (2001) power matrix is constructed around the idea that all buyer and supplier relationships are "*predicted on the relative utility and the relative scarcity of the resources that are exchanged between the two parties*". Cox's (2001) power matrix is presented in the following figure and the power attributes are expressed in each box. According to the author a buyer can be located in one of the four basic power positions; *buyer dominance, interdependence, independence and supplier dominance.* 



Figure 2-2: Power matrix, Source; Cox (2001)

*Buyer dominance:* In this box the buyer has the power relative to the supplier. This provides the basis for the buyer to leverage the supplier's performance on quality and/or cost improvement, and ensure that the supplier only receives normal return (Cox, Understanding buyer and supplier power: A framework for procurement and supply competence, 2001).

*Interdependence:* In this situation either of the parties have the power to force the other parties to do something it doesn't wish. Both buyer and supplier possess resources that require the two parties in the exchange to work closely together (Cox, 2001).

*Independence:* In this situation neither buyer nor supplier has leverage opportunities. This results in acceptance of price and quality levels for both party's. For a buyer's point of view

this could be fortunate, since it can indicate that the supplier does not have leverage opportunities and may be forced to operate at only normal returns (Cox, 2001).

*Supplier dominance:* In this quadrant the supplier has all the levels of power in the relationship. In this situation one might expect that the supplier will close markets to competitors and many of the barriers to market entry that allows above-normal returns to be sustained by possessing isolation mechanisms (Cox, 2001).

Cox (2001) argues that the ideal situation for the buyer is to be placed in the Buyer dominance box, however this is not always possible due to countervailing power resources available to the supplier. Also suppliers will try to reposition themselves into the supplier dominance box (ibid).

# 2.4 Purchasing

The role of purchasing has dramatically evolved the last decades. In 1970s purchasing was just seen as an administrative function within an organization, whereas in the 1990s, purchasing became emphasized as a strategic part of the organization and increasingly referred to as supply management rather than purchasing (Cousins P., 2008). SCM has changed the way firms purchase from suppliers. Buyers have today moved towards long-term, collaborative relationships with fewer suppliers (Cousins P., 2008). A company's purchasing practices can impact the effectiveness of its SCM strategy and its financial and market performance. Both academics and practitioners have recognized that purchasing is key to a firm's competitive advantage, and that increased profitability, market share and technological innovation can be achieved through an appropriate purchasing strategy (Fisher, 1994). It is therefore important to maintain a good relationship with the suppliers and customers. By reviewing previous researches, it can be found that buyer's purchasing strategy plays a significant role in the buyer-supplier relationship. Kraljic (1983) can be viewed as one of the pioneers in literature within supply management for his thoughts regarding purchasing's strategic role within an organization. Kraljic (1983) argued in 1980 for the importance of purchasing and that it is the purchasing that is actually engaged in a relationship with suppliers. He argued that purchasing must become supply management; from operational to strategic (Kraljic, 1983).

## 2.4.1 Purchasing power

## **Kraljic (1983)**

As suppliers are important for the success of a company, choosing and establishing a policy for how to behave towards suppliers then plays a vital part in the company's own efficiency and competitiveness. Establishing good buyer-supplier relationships is a continuous and costly process requiring both time and resources. Choosing a relationship level can be supported by a matrix model established by Kraljic (1983). According to Kraljic (1983), companies need a supply strategy and what type of supply strategy to follow depends on two conditions; first; how strategic important the purchased item is; in term of value added to the final product, the degree of raw material in total costs as well as the effect on the profitability and so on. The second condition; complexity of the supply market; in terms of supply scarcity, technology, material substitution, cost of logistics, entry barriers and complexity and so on (Kraljic, 1983).

Based on the two conditions above Kraljic (1983) introduces a four-stage model of how to structure the supply strategy and thereby an action plan. Its purpose is to help purchasers maximize supply security and reduce costs, by making the most of their purchasing power.

#### **Phase 1 – Classification:**

The first phase an organization needs to do is to *classify* profit impact and the supply risk of the purchased items. Profit can be defined as "*the volume purchased, percentage of total purchase cost, or impact on product quality or business growth*" (Kraljic, 1983). Further he defines supply risk as "*availability, number of suppliers, competitive demand, make-or buy opportunities, and storage risks and substitution possibilities*" (Kraljic, 1983). Based on this criteria's Kraljic (1983) have a matrix that is generally used on issue of how to manage the relationships associated with the purchases among buyers. Also it illustrates four main categories, which can classify the degree of complexity of the component/product that affects the level of supplier involvement. These categories are *leverage, strategic, bottleneck* and *non-critical categories*.

*Leverage category* indicates the purchase that is easy to manage but strategically important (Kraljic, 1983). In general leverage products can be obtained from various suppliers. These products represent a relatively large share of the end product's cost price in combination with relatively low supply risk. A minor change in price or change in quality will strongly affect the cost price. In the balance of power between the buyer and the supplier, the buyer is the dominant part (Kempeners & Van Weele, 1972 in Caniels & Gelderman, 2007). The buying power is actively used to get better deals with suppliers. For this category the supplier's dependency is expected to be high, while the buyer's dependency is expected to be quite low (Caniels & Gelderman, 2007).

*Non-critical category* indicates the purchase that is easy to manage and have a low strategic importance (Kraljic, 1983). These products usually have a small value per unit, and many alternative suppliers can be found for these products. Non-critical products usually have a small value per unit. Many alternative suppliers can be found for these products. According to Caniels and Gelderman (2007), from a purchasing view, these items cause few technical or commercial problems. The routine character of the transactions indicates that the mutual dependence between buyer and supplier is balanced. Because of this, total interdependence is low, as the buyer's dependence and the supplier's dependence will be both quite low (Caniels & Gelderman, 2007).

*Strategic category* indicates the purchase that is hard to manage and have a high strategic importance. These products represent a considerable value to the company in terms of a large impact on profit and a high supply risk. Often strategic products can only be purchased from one supplier (single-source), causing a significant supply risk. According to Caniels and Gelderman (2007) firms will aim at building a partnership relationship with the supplier in order to counterbalance the supply risk. The mutual trust and commitment that comes with the relationship is likely to reduce the supply risk to a minimum. The situation can be characterized as one with balanced power. Buyer and supplier are both heavily involved in the partnership; therefore the mutual dependency is expected to be high. Total interdependence is expected to be high as well due to the intensity in the relationship (Caniels & Gelderman, 2007).

*Bottleneck category* indicates the purchase that is hard to manage and have a low strategic importance. Bottleneck products have less influence on the financial results of a firm.

However they are vulnerable with regard to their supply, as suppliers have a dominant power position for these products. In this product segment, buyers and suppliers are not highly involved in the relationship and total interdependence is expected in this quadrant (Caniels & Gelderman, 2007).

The illustrated figure shows the complexity of supply market can be measured by factors such as potential monopoly condition, technological advance and product complexity (Kraljic, 1983).



Figure 2-3: Kraljic's matrix (1983)

Depending on the type of category the purchased items falls into, specific purchasing approaches are proposed. However, it is important to emphasize that the classification can change over time (e.g. a bottleneck item might over time become a commodity item. For strategic items, Kraljic (1983) propose using the strategy *supply management;* where the process might be complex, as much data and accurate information is required, such as detailed market research, developing long-term relationship and so on. For bottleneck items, he propose using the strategy *sourcing management;* which includes some specific market analysis, as volume of purchased items, control and backup plans over vendors due to high supply risk. Leverage items use the strategy *material management;* where the company can

exploit its purchasing power and select among several vendors, combine purchasing both on spot and contract and make good market data with medium-term demand planning. And finally, for non-critical items use the strategy *purchasing management;* where the focus is on product standardization, optimization and efficient processing and makes simple market analysis and short-term demand forecasts (Kraljic, 1983).

Purchase categorization is expressed in figure:

Material Management:	Supply Management:
Procurement focus: Leverage items Key performance criteria: Cost/price and material flow management Typical sources: Multiple suppliers, chiefly local Time horizon: Varied, typically 12 to 24 months Items purchased: Mix of commodities and specified materials Supply: Abundant Decision authority: Mainly decentralized	Procurement focus: Strategic items Key performance criteria: Long-term availability Typical sources: Established global suppliers Time horizon: Up to ten years; governed by long-term strategic impact Items purchased: High value materials Supply: Natural scarcity Decision authority: Centralized
Purchasing Management: Procurement focus: Non-critical items Key performance criteria: Functional efficiency Typical sources: Established local suppliers Time horizon: Limited; normally 12 mounths Item purchased: Commodities Supply: Abundant Decision authority: Decentralized	Material Management: Procurement focus: Bottleneck items Key performance criteria: cost management Typical sources: Global, new suppliers Time horizon: Variable,depending on availability Items purchased: Mainly specified materials Supply: Production-based scarcity Decision authority: Decentralized, but centrally coordinated.

Figure 2-4: Purchase categorization, based on source: Kraljic (1983)

## Phase 2 – Market Analysis:

The next phase in Kraljic's (1983) framework is market analysis. In this phase the company weights the bargaining power of its suppliers against its own strength as a customer (See figure 4, below).


Figure 2-5: Purchasing portfolio Evaluation criteria, based on source: Kraljic (1983)

This matrix shows the relative power position of the company in the corresponding supply market (Kraljic, 1983). It reviews the supply market and assessing the availability of strategic materials in terms of both quality and quantity and the relative strength of existing suppliers. Then the company analyzes its own needs and supply lines to get the kind of supply terms they want (ibid). In this step you investigate how much power your suppliers have, and how much buying power you have as their customer. A good tool to use in this step of the analysis is Porter's five forces analysis. We will present this analysis later in this chapter.

## Phase 3 – Strategic positioning

The third phase is positioning (Kraljic, 1983). Based on the first phase, classification, the purchased items are in this phase positioned as in the matrix below. Compared to the market (e.g. supplier), the matrix identifies the strength and opportunities for the firm. The matrix is divided into three types of risk, based on level of strategic trust. For instance, for items where the company plays a dominant role and the suppliers a low, the appropriate strategy proposed

is referred to as "*exploit*". The strategy "*diversify*" is proposed for items where the supplier is the dominant player. "Diversify" refers to being defensive and look for alternative items to substitute. If items purchased is not critical or of high risk and suppliers are equally dominant, then the proposed approach is "*balance*", which refers to a balanced strategy, which means to combine diversity and exploit strategies (ibid).





Figure 2-6: The purchasing portfolio matrix, (Kraljic, 1983)

## **Phase 4 – Action Plan:**

The final step in Kraljic's (1983) framework is action plan; which is based on the classification, analysis and positioning from the previous steps. The action plan is based on decisions regarding factors such as price, substitution, volume, logistics and so on. For instance, if the company is the dominant in the relationship and the supplier is classified as weak (Kraljic, 1983). The "exploit" strategy is to be used. In this situation the volume of the item is to be spread (reduce risk of dependency on one supplier). Price can be pressed for reduction, instead of long term contracts, spot purchases is recommended, and inventory to be kept low. In this phase, the company should explore a range of supply scenarios in which it lays out its options for securing long-term supply and to take advantage of short-term opportunities. You can also increase your buying power by consolidating to a single supplier.

And in other situations, you could bring the production for the item in-house (ibid). Following is a model that expresses the proposed strategies regarding various factors.



**Strategic Implications of Purchasing Portfolio Positioning** 

Policy issues			
Volume	Spread	Keep or shift carefully	Centralize
Price	Press for reductions	Negotiate opportunistically	Keep low profile
Contractual coverage	Buy spot	Balance contracts and spot	Ensure supply through contracts
New suppliers	Stay in touch	Selected vendors	Search vigorously
Inventories	Keep low	Use stocks as "buffer"	Bolster stocks
Own production	Reduce or don't enter	Decide selectively	Build up or enter
Substitution	Stay in touch	Pursue good opportunities	Search actively
Value engineering	Enforce supplier	Perform selectively	Start own program
Logistics	Minimize cost	Optimize selectively	Secure suffi- cient stocks

Figure 2-7:Strategic implications of purchasing portfolio positioning (Kraljic, 1983)

# 2.5 The Supplier perception analysis

The supplier perception analysis is often used as a complementary to Kralijc's (1983) portfolio analysis. The supplier perception analysis is used to gain an understanding of the organizations position in the market from the supplier's point of view. The analysis gives an indication of which type of buyer-supplier relationship that should be developed and provides an insight to how this can be achieved. Objectives are; to determine the organization's position in the supplier's marketplace from the supplier's viewpoint.; to understand the level of attractiveness of the organization's business to the supplier and thus determine how to increase this attractiveness and the suppliers fear of losing the account; and finally, to determine what type of buyer-supplier relationship is the most appropriate to adopt (NIMA). Behavior and pricing are the most essential factors when considering how a supplier sees a customer. The analysis is based on the evaluation of the customer's current attractiveness to the supplier and the evaluation of the future value of the account. Attractiveness of the account is concerned with how the supplier view or perceive to view the attractiveness of the account, and if it fit against their business plan (NIMA). How attractive (profitable) the account is to the supplier can be measured in terms of elements of behavior such as value, turnover or account/client boundaries (SpringTide, 2010). The value of the account is determined by the financial importance that the account represents to the supplier. The future value of the account can be assessed according to; payment terms, volume, contract between parties, forecast demand communication, use as a reference customer and strategy compatibility (ibid).

In the light of these factors, the buyers should generate their own matrix from the supplier's perspective. In which of the four quadrants the matrix will reveal - Nuisance, Develop/Opportunity, Core or Exploit - the supplier is likely to place the buying firm at the present time (NIMA).



Figure 2-8: Supplier Perception matrix, source; based on NIMA

Further the balance-of-power issues needs to be taken into consideration. The relative dependence between the supplier and the buyer becomes apparent when plotting the Kraljic's (1983) portfolio quadrants against the supplier's perception matrix quadrants. A large imbalance in power introduces risk into the buyer-supplier relationship, which could cause it to fail. Ideally, the relationship should be mutually beneficial (NIMA). Following is a combination of the supplier perception analysis and Kraljic's (1983) product classification matrix:

	Strategic	Leverage	Routine	Bottleneck
Development	Enable joint continuous opportunities, develop mutual business goals	Encourage supplier to explore opportunities for continuous improvement.	Maintain an open, transparent and basic relationship	Identify areas of mutual dependence
Core	Establish formal policy to enable value a creation and innovation	Establish clear Performance Objectives and Manage political Risks if supplier Change is necessary	Consider bundling if it supports other category strategies	Build and maintain long-term relationships
Nuisance/ Exploit	Rethink relationship, improve standing with supplier rapidly, change internal constraints to allow competition	Seek competition And alternatives, Supplier change To be considered	Seek alternatives, monitor as required	Explore option to change supplier or specifications, ensure assurance of supply
	Structure closely Aligned relationship to Maximize value	Monitor and seek to increase competition	Develop alternative Supply options	

*Figure 2-9: Combination of the supplier perception analysis and Kraljic's (1983) product classification matrix, based on source: (Nima)* 

# **2.6 Porters Five Forces**

Since 1979 Porter's five forces has been used as a framework for industry analysis. The five forces measure the competitiveness of the market deriving its attractiveness and use this to determine the company's risk from in its industry. The Porter's Five Forces tool is a simple but powerful tool for understanding where power lines in a business situation. It helps understand both the current competitive position and the position you're considering moving into. The five forces are 1) Threat of New Entrants, 2) Threat of Substitute Products or Services, 3) Bargaining Power of Buyers, 4) Bargaining Power of Suppliers and 5) Competitive Rivalry Among Existing Firms (Porter, 2008)

### Exploring the five forces model



Figure 2-10: Porter's five forces (Porter, 1979).

#### **Buyers Power**

Buyers have the power when there are only few of them (Porter, 2008). When the customer purchases a significant proportion of output of an industry and when they can choose from a wide range of supply firms. They find it easy and inexpensive to switch to alternative suppliers. The more powerful a buyer is relative to the seller, the more influence the buyer has. This influence can be used to reduce profits of the seller through a reduction of prices, influence over whom the seller supplies to or increased favor in customer service or order delivery (ibid).

#### **Supplier Power**

Suppliers have the power when there are only few large suppliers and the resource they supply is scarce (Porter, 2008). When the cost of switching to an alternative supplier is high and the product is easy to distinguish and loyal customers are reluctant to switch. The customer is small and unimportant and the supplier can threaten to integrate vertically. And there are no or few substitute resources available. The more influence the supplier has, the more powerful the supplier will be relative to the buyer. The supplier can use its influence to

reduce the profits of the buyer. This can be done through advantageous pricing, shifting costs onto the buyer or by limiting quality of the product or service (ibid).

Easy to Enter	Difficult to Enter
Common technology	Patented or proprietary know-how
Access to distribution channels	Well-established brands
Low capital requirements	Restricted distribution channels
No need to have high capacity and output	High capital requirements
Absence of strong brands and customer loyalty	Need to achieve economics of scale for
	Acceptable unit costs

### What are the Barriers of Entry

Table 2-1: Barriers of entry source: based on Porter (1979)

## **Competitive Rivalry**

Industry profits can be affected when rivalry among industry. It can be affected through 1) downward pressure on prices, 2) increased innovation, 3) increased advertising and 4) increased service/product improvements (Porter, 2008). In economics, a monopoly industry structure earns the most profit while the "perfect competition" industry structure earns the least. An increase in competitive rivalry among existing firms brings an industry closer to the theoretical "perfect competition" state. Large number of firms, slowed industry growth, high fixed costs or high storage costs and high exit barriers can be factors that increase competitive rivalry among existing firms (ibid).

#### **Threat of Substitute Products or Services**

A substitute is a product that performs the similar or same function as another product. The more substitutes a product has, the more elastic the demand for the product becomes. Elastic demand means increased consumer price sensitivity, which equates to less certainty of profits. An attractive price of substitutes, increased quality of substitutes and low switching costs to consumers can be conditions that increase the threat of substitutes.

# 2.7 Theoretical framework

As we have argued for in this literature review; dependency, power, trust, communication and commitment are key components of a buyer-supplier relationship (Ambrose, Marshall, Fynes, & Lynch, 2008). We have created a theoretical framework to illustrate the relationship between the case company and its two suppliers. The two individual suppliers are connected to CC through the buyer supplier relationship circle. Within the buyer supplier circle, the key components trust, commitment, power, dependency and communication are explored. Finally we will explore how the relationship is affected by the market they operate in. In order to illustrate how this case study is based up, we have also created an analytical framework that illustrates the process of analyzing data. The table in the framework expresses how the analysis of the buyer-supplier relationships and the markets the two dyad relationships operates in is built up and what theory and authors we based the analysis on.

Following is an illustration of the theoretical framework for this thesis:





Components	Theories
Trust	Liu et al. (2010)
Commitment	Liu et al. (2010)
Power	Kraljic (1983) stage 1 and 2
	Porter (1979)
Dependency	Supplier perception analysis (NIMA)
	Cox (2001)
Communication	Prahinski & Benton (2004)

Figure 2-11: Theoretical framework

# 3. Methodology

This chapter will provide an outline of the methods used in this study and explains the research design and data collection methods. Then the data collection process will be outlined, before the validity and reliability of this research are discussed.

# 3.1 Research Design

According to Yin (2014) the research design serve as a logical plan to involve the links among the research question, the data to be collected and the strategies for analyzing the data so that the study's findings address the intended research question. Ellram (1996) classifies the research design according to the type of data used and the type of analysis performed on the data.

Types of	Analysis*
Primarily Quantitative	Primarily Qualitative
Survey data, secondary data, in conjunction with statistical analysis such as: factor analysis cluster analysis discriminant analysis	Case studies, participant observation, enthnography. Characterized by: limited statistical analysis, often non-parametric.
- simulation - linear programming - mathematical programming - decision analysis	- simulation - role playing
	Primarily Quantitative Survey data, secondary data, in conjunction with statistical analysis such as: factor analysis cluster analysis discriminant analysis - simulation - linear programming - mathematical programming - decision analysis

Figure 3-1: Research design (Ellram, 1996)

According to Ellram (1996) qualitative results are frequently expressed verbally, often to create an understanding of relationships or complex interactions. Empirical data is gathered for analysis from the real world, often via surveys or case studies. As this thesis will investigate the phenomenon of how the relationship between CC and their key suppliers are affected by the market, qualitative data will be most suited for this as this form of analysis is more suitable to create a deeper understanding of the relationship. As we will explore a

phenomenon of how two dyad relationships in the oil service industry has been effected by the oil and gas market, the thesis will also use empirical data, as this is suitable to describe real world situations (Ellram, 1996).

According to Yin (2014) the variables guiding the researcher to choose a research strategy are: types of research questions posed, extent of control over behavioral events and relative focus on contemporary versus historical events. Yin (2014) suggests a case study would be the preferred method in situations where: the main questions are "how" or "why" questions; a researcher has little or no control over behavioral events; and the focus of study is a contemporary phenomenon. Thus our research questions are of the type "how", focuses on contemporary events, and we don't have control over behavioral events, a case study will be the most suitable research strategy for this thesis. As we want to investigate a phenomenon in depth, by using empirical and qualitative data we should, following Ellram's (1996) and Yin's (2014) recommendations, use a case study design to investigate this phenomenon in depth.

Based on the above discussion, the research design for this thesis will be a case study and use qualitative empirical data for the analysis.

## 3.2 Case study

Yin (2014) defines a case study as "an empirical inquiry that investigates a contemporary phenomenon within its real life context". Case studies as a research strategy is well suited when one wants to investigate a phenomenon in depth in order to understand the underlying patterns and causes as it provides depth and insight into a little known phenomenon. (Yin, 2014). With this research the goal is to gain an understanding of how the relationship between CC and their key supplier is, and how or if this has been affected by the oil and gas market. This research has an exploratory nature, as it wants to address how CC currently manages their relationship with their supplier, and how this is affected by the market situation. The main research question "*How is the buyer supplier relationship between an oil service company and two of its suppliers affected by todays oil and gas market?*" has an explorative purpose, where the intention is an in depth investigation of the research question, that has not been previously investigated. The research context constitutes a single case study where the main unit is CC, and the two suppliers are an integral sub-unit. Our study entails more than

one unit of analysis within the single case. According to Yin's (2014) terminology this means that the study is a single embedded case study. The focus on single cases can be useful to research in depth the relationship of some particular behavior to its context (Kvale, 1996). Thus the purpose of this master thesis is to investigate the phenomenon of how a relationship between an oil service company, our case company, and two of its key supplies is affected by the current market situation.

An important distinction with the case study method is that it copes with a distinctive situation in which there will be many more variables of interest then data points. Because of this, case studies require multiple sources of evidence because findings are likely to be more accurate if they are based on several different sources of information (Yin, 2014). This study relies on three sources of evidence: interview, documentation and observation.

# 3.3 Data collection

According to Yin (2014) there are two types of data, primary and secondary data. Primary data is data gathered for a specific analysis, such as surveys, observations or interviews. Secondary data is data gathered by other people for other means than this exact research, such data can be other studies, books, journals, statistics, documents etc.

## 3.3.1 Secondary data

Secondary data collection is used along with the primary data (interviews), to get an in-depth knowledge of the phenomenon. The secondary data would be gathered through the use of published articles, journals, books and documentation from within CC. The literature used in our thesis was gathered through literature search in the UIS library databases, on the databases of Business Source Complete, Oria, Science Direct, Emerald and Google Scholar, by searching for topics such as "buyer-supplier relationships" and "supply chain management", as well as the topics "trust", "commitment", "communication", "power" and "dependency". Also literature was found by viewing relevant reference lists of the available articles. Documents, such as a spend reports from within CC was used to get information about which suppliers CC uses most frequently and from whom they buy most. This information was useful when deciding which suppliers to use for this research, as we wanted to use some key suppliers that CC uses frequently. In this thesis we have also used

documents, such as vendor statistics and scorecards to get more information about the current relationship with the chosen suppliers. For confidential reasons these documents are excluded from this report.

## 3.3.2 Observation

As one of the authors of this thesis currently works as a student resource for the case company in the sourcing department, this has made it possible to make some observations, like how the CC sourcing team handler their suppliers on a daily basis. We have been able to make observations regarding communication, information sharing, information flow, weekly meetings and types of vendor measurements. This has made it easier for us to understand the whole procurements process and become aware of several SCM issues, more specifically; issues regarding buyer-supplier relationship. We have had the opportunity to constantly ask questions that supports what we have found and get other views on these findings.

## 3.3.3 Interview

According to Yin (2014) interview is one of the most important sources of case study information. As a data collection method interviewing is a good way to find out about other persons explanation of behavior or actions. As this research wants to explore a buyer-supplier relationship, interviews would be a suited method to find out about the behavior and actions in this relationship. In the methodology we have decided to use qualitative research interview and follow Steinar Kvale's (1996) "seven phases in interviews". According to Kvale (1996), qualitative research interviews seeks to understand the world as seen from interviewees page in order to bring out importance of people's experiences and to uncover their experience of the world, ahead of scientific explanations. Research interview involves cultivation of conversations skills, skills that most of us already possesses by virtue of our ability to ask questions. We have chosen qualitative research interviewing to be able to understand both the seller and buyer's perspective in the best possible way. We have decided to have a semistructured research interview that focus on the interview experience of the topic and makes it possible for us to ask follow-up questions. Semi structured is neither an open conversation nor a closed questionnaire conversation. It is performed in accordance with a interview guide that circles into specific themes.

The seven phases of interviews are: 1) thematises an interview project, 2) design, 3) the actual interview, 4) transforming write call or discharge of the interview, 5) analysis, 6) verification and 7) reporting (Kvale, 1996).

We created two interview guides; one for the suppliers and one for CC. The interview guides were developed with consideration to our research question and the literature. In order to answer our research question, our questions stem form the topics of buyer-supplier relationships, in addition to some questions in general concerning the company and its products. In order to get the best possible response form the interviewees, we structured the questions in various ways. First we started with some introduction questions. Our objective with these questions was to obtain some general information about the Supplier, its history with CC and the products the supplier provide. The Buyer-Supplier questions, which are the largest part of the interview guide, were intended to initiate the interviewee to elaborate on his/hers thoughts of the relationship. The last questions were designed to reveal the interviewee's general thoughts of the relationship, as well as areas of improvements.

The literature used in our interview guide is based on our theory chapter by searching for topics such as "buyer-supplier relationships", "oil and gas market" and "supply chain management", in addition to "trust", "communication", "dependency", "commitment" and "power". Also, literature was found by viewing relevant reference lists of the available articles.

According to Kvale (1996) one should interview as many as needed to find out the information you seek, which again depends on the purpose of the study. If the numbers are too small, the likelihood to make a statistical generalization is small. Since the purpose of our research is to investigate the phenomenon of how the relationship between CC and its key suppliers is affected by the market, this might not be the purpose of this study. The suppliers to use in our research were selected based on secondary data gathered from CC. The criteria's for deciding upon a sample of suppliers to use, were that they were used frequently by CC and perceived as critical for the case company. The interviews were conducted with CC's employees in the sourcing department, which is in day-to-day contact with the suppliers.

## 3.4 Conducting the interviews

To gather primary data, interviews have been done with employees form the sourcing department of CC and employees from there key suppliers. The interviews were performed based on the established interview guide. The initial interview guide was sent to the interviewees a few days prior to when the interview was conducted. This would give the interviewees time to read through the questions and get familiarized with the topics in advance.

We conducted four interviews, two with CC employees, and two with the chosen suppliers. All of the interviews with CC were conducted in person at the interviewees work location in Dusavik, Stavanger. The interview with S1 and S2 were also conducted in person, S1 at their work location, as their facilities were located close to CC and S2 at CC's work location. Before starting the interview, we briefed the interviewee on the purpose of the interview, and received approval of taping the conversation, as suggested by Kvale (1996). In addition, we pointed out that we, as interviewers, where there as "consultants" and did not receive payment from CC, in order to ensure the interviews would feel comfortable and give more honest replies to our questions. Our interviews with CC lasted between 40-60 minutes, while the interviews with the suppliers lasted between 90-120 minutes. The reason why the interviews with the suppliers lasted longer was because we sought deeper understanding of their company, business and products, as we had already gained knowledge of CC from our investigation of their industry.

# 3.5 Critique of research method

The case study as a research strategy has been criticized form several reasons. Yin (2014) lists three of the most common objections against it to be; that case studies lack thorough research meaning that the researcher may present vague data or biased views to influence direction of results and conclusions. The second critique is that case studies offer little basis for scientific generalization. The third issue is that Case studies are time consuming. According to Ellram (1996) good research design in a study requires external validity; construct validity, reliability, and internal validity. Weaknesses and measures that have been taken regarding these will be discussed further.

## 3.5.1 Validity

For all research the key quality control issue deals with the validity of a study and its findings. A valid study is described as one that has properly collected and interpreted its data so that the conclusions accurately reflect and represent the real world that was studies (Yin, 2014). According to Yin (2014) testing for external validity, deals with the problem of knowing whether the findings of the study are generalizable, beyond the actual case study. One way of doing this is to use several cases in order to increase the external validity, but as our study is a single case study, we are only able to generalize the findings to a certain extent to cases having similar assumptions. Thus the purpose of this research is not to generalize, but rather provide an indication for similar situations and behaviors. One tactic to increase external validity this thesis has a thorough literature review, in which the interview guide is based on. To ensure construct validity, the transcribed interviews were sent to each interviewee. By doing this, each interviewee had the possibility to comment and add additional information.

Internal validity is the question as to the degree to which the results match reality. By interviewing the responsible employees at CC, as well as the responsible employees at the suppliers, we believe the biases effects is reduced as well as the internal validity of the analysis increases, as both parties are being heard in terms of multiple sources of evidence. All the interviews was recorded and transcribed to ensure that we didn't miss anything that was said. The four interviews were conducted in Norwegian, thus we reduce the risk of any misunderstandings or misinterpretations that might occur when forcing the interviews were intended to be semi-structured and open ended, speaking the interviewees preferred language makes it less uncomfortable for them.

In order to control the biases of any individual researcher, both of the authors were present under all interviews. During the analysis of the material both authors coded and interpreted the interviews individually, before meeting and discussing the findings. These are techniques that contribute to increase internal validity. In this thesis we only conducted interview with each interviewee representing each relationship. By interviewing more than one-person form the supplier and CC, we could have reduced the chance of any biases and increased the internal validity. Also interviewing other functions within the company, such as Project Teams and quality assurance groups, could have helped increase the internal validity.

## 3.5.2 Reliability

In this research we have mainly based our empirical data on qualitative data, and little quantitative. This increases the risk of bias and subjective information. This weakness relates to method triangulation, which refers to the combination of various research data (qualitative and quantitative). Qualitative data based primarily on subjective opinions of the interviewees may indicate results that lead to inaccurate conclusions. Thus it is important to consider the fact that such data are possibly not entirely reliable. In this case, interviewees may have responded in a way they believed CC wanted them to respond. In order to obtain honest answers from our interviewees we could have made a survey, where the respondents would have been anonymous. The goal of reliability is to minimize errors and biases in a study. Reliability addresses the repeatability of the study, and weather one will get the same result if the analysis is repeated.

According to Yin (2014) a good guideline for doing case studies is to conduct research so that an auditor could repeat the procedures and arrive at the same result. Reliability relates to the data used, the way they are collected and how they are processed. In relation to qualitative research, this criterion is often impractical. This is partly because it is not used structured data collection techniques and that it is virtually impossible for another scientist to duplicate research and get the same answer. Our interpretation of data will not be completely objective as it is influenced by our background and experiences. To strengthen the reliability we have references made to the literature, and detailed described procedures, methods and decisions throughout the research process. Also the procedure in which the primary data has been collected is explained and copies of the interview guide can be found in the appendix. These measures have been done to make the research process as transparent as possible, and make it possible for others to review the work.

# 3.6 Data Analysis

After transcribing the interviews, we coded the interview data in order to capture practices that could reflect our main topics; power, dependence, trust, communication, and commitment. We followed Kvale's (1996) approach of analyzing interviews when coding the interviews. This approach is referred to as condensation, which entails compressing long statements into short sentences in order to get better overview. We then divided the coded data into each relationship, meaning that we first looked at the relationship between CC and Supplier 1(hereafter referred to as S1) and then CC and Supplier 2 (hereafter referred to as S2). In order to illustrate how this case study is based up, we have created an analytical framework, which we also introduced as a part of this thesis theoretical framework in chapter 2. This framework illustrates the process of analyzing data. The table illustrates the main topics for our analysis and what theory and authors we based the analysis on:

Components	Theories
Trust	Liu et al. (2010)
Commitment	Liu et al. (2010)
Power	Kraljic (1983) stage 1 and 2 Porter (1979)
Dependency	Supplier perception analysis (NIMA) Cox (2001)
Communication	Prahinski & Benton (2004)

Figure: 3-2: analytical framework

In order for us to analyze the collected data based on the literature we have created a set of control questions based on the literature used for the different analysis. To classify the product impact and the supply risk into Kraljic's (1983) product matrix we have created some control questions based on Kraljic's (1983) purchasing portfolio matrix. Following is an illustration of these control questions, with the following distribution of risk points:

Product Impact	0 risk points	1 risk points	2 risk points
Value added to final product	Low	Medium	High
Volume purchased	Low	Medium	High
Effect on profitability	Low	Medium	High
Impact on product quality	Low	Medium	High

Table 3-1: Classification of product impact, source: based on Kraljic (1983)

Supply Risk	0 risk points	1 risk points	2 risk points
Availability	High	Medium	High
Number of suppliers	Several	Medium	Few or single-sourced
Substitution possibilities	High	Medium	Low
Technology requirements	Low	Medium	High

Table 3-2: Classification of supply risk, source: based on Kraljic (1983)

The classification is based on the interviews with the case company and the suppliers, thus qualitative data as spend analysis, scorecards etc. Based on the above point distribution, one can see that the highest possible risk points equal to 12 points for each of the two conditions (profit impact and supply risk).

In order to classify the relationship type according to Liu et al's (2010) framework, we have created control questions in order to decide the level of trust and commitment present in the relationship. The control questions of commitment are based on Liu et al.'s (2010) interpretations of commitment, which entails satisfaction, communication, and long-term commitment and perspective. We have on the other hand based trust classifications on Sako's (1997) three types of trust.

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		10		

Commitment	High	Medium	Low
Strategic meetings of future exchange	Yes (2 pt.)	Some (1 pt.)	No (0 pt.)
Share forecast of future demand	Yes (2 pt.)	Some (1. pt.)	No (0 pt.)
Efficient inter-organizational communication	Yes (2 pt.)	Some (1. pt.)	No (0 pt.)

Low commitment: 0 points.

Medium commitment: 1 points.

High commitment: 2 points

Table 3-3: Classification of commitment, source: based on Liu et al. (2001)

Trust	High	Medium	Low
Contractual trust	Yes (2 pt.)	Some (1 pt.)	No (0 pt.)
Competence trust	Yes (2 pt.)	Some (1. pt.)	No (0 pt.)
Goodwill trust	Yes (2 pt.)	Some (1. pt.)	No (0 pt.)

Low trust: 0 points.

Medium trust: 1 points.

High trust: 2 points.

Table 3-4: Classification of trust, source: Sako (1997)

We will use these control questions and distributions of risk points throughout the analysis of product classification and trust and commitment in the relationship between CC and supplier 1 and 2.

# 4. Analysis: Supplier 1 (S1)

In this chapter we seek to gain a better understanding of the current relationship between CC and the supplier as well as the market situation the companies operates in. This initial stage is divided into sub-steps, where we use different theories and concepts from the literature chapter in order to reveal the current situation between CC and the Supplier and their market situation.

# 4.1 Supplier 1 (S1)

S1 is one of Norway's leading providers in machining, welding and mechanical services, and was founded in 1980. The road from two men in a tent on Kalhammaren to 50 employees in modern premises in Tananger has provided valuable experience, refined expertise and given a particular expertise in the solution of time-critical tasks. CC and S1 has been exchange partners for more than 20 years and have a long standing history together. S1 provides maintenance/repair and new parts for all products that CC needs for machining or welding.

In order to answer research question 1 and explain the current buyer-supplier relationship between CC and the two suppliers, we first sought to elaborate the importance of the products and services provided by the suppliers. This was done by following Kraljic's (1983) classification of product and purchasing strategies. First we start with classifying the products the supplier provides to CC by using Kraljic's (1983) phase 1: classification. The product is classified based on the purchased items' profit impact and supply risk.

# 4.2 Kraljic phase 1; product classification:

## 4.2.1 The purchased product 'profit impact:

The services purchased from S1 include repairs, modifying and creating new-machined parts. These services are used on both surface and subsea products and parts. Surface which are used above sea level and subsea which are used deep in the ocean on the seabed, attached to Subsea Xmas trees, a tool used in the oil drilling operations. Based on Kraljic (1983) the purchased product's profit impact can be defined based on value added to final product, volume purchased, effects on profitability, and impact on product quality, which is discussed below.

#### Value added to final product:

Most services and products S1 provides are critical, and as the interviewee states, "*all parts are critical, and a small screw can hold up an entire project*" (Buyer 1 - Lead sourcing specialist at CC). According to interviewees from S1 "*everything we do is critical, because everything in the oil and gas industry are initially considered as critical*". S1 provides machining to the final products, Xmas trees. "*Here there are a lot of revenue*" (Buyer 1.- Lead sourcing specialist at CC). Thus, the value added to the final product is high, as the service purchased from S1 is needed for the final products being usable.

#### Volume purchased:

Because CC is in the aftermarket the services CC needs from S1 does not require a high volume. However CC have from 2012, 2013 and 2014 used approximately 20-40 million NOK a year on services and products provided by S1. This is because CC has mainly used S1 for repairs because of their welding procedures that are in accordance with the qualifications. Both interviewees from S1 and CC also state that the volumes have decreased recently because of the changes in the market. S1 are very expensive, due to their unique welding procedures. The interviewee from CC states "*we buy one or two and then fixes one or two components at the time, while other companies like Baker Hughes and Conoco Phillips order 100 and 100 at a time*". Thus in terms of volume, CC does not purchase high volume of components from S1, but the price range from the services they provide is very expensive

(Buyer 1. - lead sourcing specialist). Therefore; even though the cost is considered to be high, the volume purchased from S1 appears to be low.

#### Effect on profitability

*"Fixing Xmas trees generates high profitability"* (Buyer 2. - lead sourcing specialist). S1 are repairing, modify, manufacturing and creating new machined parts for CC's Xmas three, which are the final product. There are high effects on the profitability of the products and services provided by S1, as the drilling operations offshore will not function without the services and products provided by S1. Thus CC's customers will not be able to drill for oil, which generates revenue, without S1's services. If S1 are not able to meet the one time delivery, this will have consequences for CC because they will not be able to deliver the product to their customers on time. If this happens daily fines, liquidated damages or reduced revenue can be a consequence. According to the interviewee at CC this has happened, as they have had to postpone the delivery of Xmas trees from one quarter to another, which leads to poor reports for CC. This is not a desirable outcome as CC are the largest contributor on a international level, and it will have a direct effect for CC on Wall Street, and *"that is not good for business"* (Buyer 2. - lead sourcing specialist). Thus S1'capabilities to deliver one time and with good quality will have an effect on CC's profitability.

#### Impact on product quality

There are many suppliers who can deliver the same services and products as S1, but because of their unique welding procedures this has diversifies them from other suppliers. The interviewee form CC states that "*S1 has no unique products, besides their welding procedures, but now more suppliers have entered the market and can deliver the same welding procedures as S1. The risk here is that we don't know the quality of these services*" (Buyer 1. - lead sourcing specialist). "*Quality is alpha and omega*" (Buyer 1. - lead sourcing specialist). "*Quality is alpha and omega*" (Buyer 1. - lead sourcing specialist). Due to the high-pressure subsea, there are high quality requirements for subsea parts, and the production of parts and assemblies are very complex. Thus, as many products are sub-sea products which are used under water in operations for many years under demanding conditions, there should be a long-term durability on the equipment (Interviewee at S1). Thus S1's services and products are critical for the final product quality and can be seen as high.

## 4.2.2 The purchased product's supply risk

Kraljic (1983) defines the supply risk of the purchased product based on number of suppliers, substitution possibilities, technology requirements and availability. We will discuss these below.

#### **Technological requirements**

According to one of the buyers at CC, the services and products provided by S1 are not technical advanced. However, he states that "tubing hangers need some technical requirements as S1 make a part exclusively for us" (Buyer 4 - Sourcing Specialist) Interviewee from S1 states that their welding procedures are advanced and emphasis that "welding is not just melting something together but is a process that has become quite advanced" (S1). Their procedures make them qualified to do specialized welding jobs on CC's products as well as on special materials. However, the interviewee also states that machining, which they also provide, are something "everyone with the right qualifications can do". (S1-) It therefore appears that the technology requirements can be seen as medium.

#### Number of suppliers

There are other suppliers in addition to S1, which can provide the same products and services. S1 argues that machining is something that all suppliers with qualifications can provide; thereby the global competition here is high. This means, the availability for these services is perceived to be high, as alternative suppliers can provide the same services. This indicates that for CC the number of suppliers available is high, which leads to low supply risk.

#### Substitution possibilities

Other types of services or products cannot substitute the services provided by S1, but alternative suppliers can also provide the same service. S1 argues that they are more unique on special welding procedures than other suppliers. According to CC, the company has high range of other suppliers to choose from, but prefer to use S1 because of their well-known quality services and the long history between the company and S1. Thus, the substitution possibility appears to represent medium risk.

#### Availability

According to CC the raw material have a long-lead time, sometimes up to twelve weeks. This is mainly because the raw material is purchased from sub-suppliers. S1 does not stock the raw material for CC, which means that the component has to arrive from the sub-supplier before S2 can assemble it. The interviewee from S1 argues that there has been some issues on the delivery time because there can occur unpredictable events during the processes. He further explains that there have been some issues regarding the expected delivery times, as "we get an offer to deliver something, but the buyers sending the offer does not understand the magnitude of what they are asking for"(-S1). He illustrates it as an offer to make a pen in three days, which is possible, but then they will also get an offer to make a platform in three days, which is not realistic. Thus, one can argue that the availability of the products and services is perceived to represent medium risk.

Based on this discussion, the products purchased from S1 can according to Kraljic's (1983) classification framework, be placed as follows:

Profit Impact	Supply Risk
Profit Impact	Supply Risk

Value added to final product	High (2pts.)	Availability	Medium (1pts.)
Volume purchased	Low (0pts.)	Number of suppliers	Low (0pts.)
Effect on profitability	High (2pts.)	Substitution possibilities	Medium (1pts.)
Impact on product quality	High (2pts.)	Technology requirements	Medium (1pts.)
Total risk points	6 pts.	Total risk points	3 pts.

Table 4-1: classification framework

This can be placed in kraljic's (1983) matrix in stage one as follows:



Figure 4-1: Product classification matrix, Based on source: Kraljic (1983).

Based on Kraljic's (1983) stage one, the overall purchased products can be classified as a *leverage product* due to the somewhat high profit impact and low supply risk. According to Caniels and Gelderman (2007) these products can be obtained from various suppliers, and represents a relatively large share of the end product's cost price in combination with relatively low supply risk. Thus, our analysis of S1's products relative to profit impact and supply risk fits this classification.

Previously discussed in the literature chapter, factors such as power, dependency, trust, commitment and communication are important concepts of a buyer-supplier relationship (Ambrose et al. 2008). As power and dependency are closely related (Caniels, 1997; Cox, 1999) we will use Kraljic's (1983) step 2 together with Porter's five forces analysis to analyze the nature of power and dependency in the relationship. This will also be used as a market analysis in order to analyze the market situation. We will then analyze trust, commitment and communication based on the interviews and the relevant literature from chapter 2.

## 4.3 Power in the current relationship

## 4.3.1 Kraljic's (1983) stage 2 combined with Porter's five forces (1979) -

## Market analyses:

In order to reveal the bargaining power between S1 and CC, Kraljic (1983) identifies a set of factors needed to be explored, which is discussed below. As mentioned in the literature review Porter's five forces analysis is a good tool to use in this step of the analysis.

### Porters five forces analysis:

To be able to use Porters five forces we will work through these questions for each area.

- Force 1: Threats of new entry?
- Force 2: Buyer power?
- Force 3: Threats of substitution?
- Force 4: Supplier Power?
- Force 5: Competitive rivalry?

## Threats of new entry:

There are some threats of new businesses starting up in this section. As the interviewees from S1 states, "*machining is something everyone with the right qualifications can do*", and the services and products S1 provides are not unique. They don't have any patented or proprietary products or services. Because the products/services are less complex, and high competition exists, this may indicate that the entry barrier is relative low. However, in order to be a supplier for CC, the supplier needs to be approved based on various criteria such as quality, due to high requirements in the industry. Thus an entry barrier exists because of the complex process of being approved for CC's AVL ("approved vendor's list").

## **Buyer power:**

*the money, and therefore the power*" (Buyer 2. - lead sourcing specialist). In the current market situation, cost savings are in focus and buyers will try to negotiate price reductions. The buyer's bargaining power is high because the suppliers are fighting to win the bidding processes. CC is a large international organization, and interviewee from S1 state that "*CC is a leading international star in this industry*". CC is a large customer and constitutes a large amount of S1's revenue. However the interviewee at CC does not think S1 depends that much on CC as they have other large customers nearby like Baker Hughes, Conoco Phillips and Schlumberger, which order much larger volumes. Because of this we will conclude that the buyer power in this case is medium to high.

#### Threats of substitution:

As we have discussed substitution possibilities previously in Kraljic's step 1 other types of services or products cannot substitute the services provided by S1, but alternative suppliers can also provide the same services. S1 argues that they are more unique on special welding procedures than other suppliers. According to CC, the company has high range of other suppliers to choose from, but prefer to use S1 because of their well-known quality services and the long history between the company and S1.

#### **Supplier power:**

According to Porter, markets with few suppliers indicate that the supplier retain the power (Porter, 2008). However in this case there are many suppliers that can provide the same products and services. Because of today's market situation and the high competition in the supplier market, buyers can easily push the suppliers to reduce the prices (Interviewee at S1). However, CC buys services from S1 because of their unique welding procedure. Interviewee from CC state that "we buy services from S1 because they have welding procedures on *inconell, 86.30 and F22 materials*". The welding procedures are as mentioned before expensive, and because CC knows that S1 have the welding procedures they need for their products and materials, they will use S1. Interviewee from S1 states that "*If CC should choose a different supplier to perform the welding procedure, the cost could easily increase by 150 000 NOK*". They explain this can happen if the supplier does not have the welding procedure for this special product and have to make a new procedure. "*Because of this we are unique in welding procedures*" (interviewee at S1). Interviewee from CC states that "*right now, S1 have some power*" (Buyer 1 - Lead Sourcing Specialist.). This is because of their welding procedure, but now there are other suppliers that have been qualified and specialized in these

procedures as well. Due to this, S1's power situation will probably change and they will get more competition on that area as well. However, because the other suppliers are relatively new on the qualified welding procedures, there will be a risk if CC would use them because CC does not how the quality of the product that they deliver is. Due to this risk, CC will have to use S1 for welding services for now. S1 does not have any proprietary parts or patents, thus besides the welding procedures there are many suppliers which can deliver the same type of product and services to CC as S1. This makes it easy for CC to switch supplier and the transaction cost involved in changing supplier is perceived by CC to be low. In this case we initially found that the supplier power would be medium due to S1's unique welding procedure. However, because other suppliers also have begun to establish these qualified welding procedures, the competition on this segment has increased and S1 is no longer unique on this. Due to this we find the supplier power to be low.

#### **Competitive rivalry:**

According to Porter in highly competitive markets with many companies chasing the same work will reduce the suppliers' power in the market. In this case S1 states that is has to be competition in order to be a healthy market, but now the competition has changed and is more extreme. Because of this it is less work and harder competition, thus it is now even more important to maintain a good relationship with customers (Interviewee from S1). The interviewees from S1 state that they are a company with long expertise and competent people that have been in the industry for many years. S1 state that "*Machinery one can buy, but competent people are more difficult to obtain and keep*" (Interviewee from S1). S1 have had a stable workforce through the years and interviewee from S1 argues that their competent workforce over many years gives them a competitive advantage in the market.

# 4.4 The supplier perception analysis

As mentioned in the literature chapter, the supplier perception analysis is often used as a complementary to Kraljic's (1983) portfolio analysis. The supplier perception analysis is used to gain an understanding of the organization's position in the market from the supplier's point of view. The analysis is based on the evaluation of the customer's current attractiveness to the supplier and the evaluation of the future value of the account. Attractiveness of the account is concerned with how the supplier view or perceive to view the attractiveness of the

account, and if it fit against their business plan. As S1 argues that CC are one of the larger actors in the aftermarket. The interviewee from S1 state that "*We look at CC as a very attractive customer and mentions CC with pride*". "*An attractive customer in the world because of their company size and requests services that is right in our core competence*". (S1) Thus, this indicates that the attractiveness of the customer is perceived as high. The value of the account is determined by the financial importance that the account represents to the supplier. The spend report for 2014 reveals that S1 are at the top of the shelf when it comes to whom CC spend most on. This indicates that the value of business is high. Based on this, the core box is the most appropriate.



Figure 4-2: Supplier perception matrix, based on source: Nima

Combining the perception analysis with Kraljic's (1983) portfolio framework: S1 falls between leverage and core which is illustrated in the figure below:

	Strategic	Leverage	Routine	Bottleneck
Development	Enable joint continuous opportunities, develop mutual business goals	Encourage supplier to explore opportunities for continuous improvement.	Maintain an open, transparent and basic relationship	Identify areas of mutual dependence
Core	Establish formal policy ta enable value a creation and innovation	Establish clear Performance Objectives and Manage political Risks if supplier Change is necessar	Consider bundling if it supports other category strategies	Build and maintain long-term relationships
Nuisance/ Exploit	Rethink relationship, improve standing with supplier rapidly, change internal constraints to allow competition	Stele competition And alternatives, Supplier change To be considered	Seek alternatives, monitor as required	Explore option to change supplier or specifications, ensure assurance of supply
	Structure closely Aligned relationship to Maximize value	Monitor and seek to increase competition	Develop alternative Supply options	

Figure 4-3: Combination of the supplier perception analysis and Kraljic's (1983) product classification matrix, based on source: Nima.

# 4.5 Trust and commitment

As mentioned in the literature chapter Zineldin & Johnsson argues that satisfaction is an important variable for trust. The results from their research found that a buyer that is satisfied with a supplier also trusts the supplier to a greater extent. In this case CC is not that satisfied with S1. Buyer 2. -Lead Sourcing Specialist says: "*In a buyer-supplier relationship you should give and take, not just take. This has been a tendency with S1. They are more interested in taking and milking the cow than to give*". When it comes to trust Buyer 2 - Lead Sourcing Specialist. Mentions that the OTD (on time delivery) has not been that great. "*We trust that they carry out what we ask them, but we don't trust that they are performing at the time we ask them*" (Buyer 2. - Lead Sourcing Specialist). Cousins (2002) argue that risk and trust appears to be the same thing, just in different ends of the spectrum, with risk tend to be negative and trust tends to be positive. In this case there seems to be more risk than trust in the relationship with S1 when it comes to OTD. CC looks at S1 like their unpredictable and unsafe when it comes to OTD rather than safe and predictable. S1 argues that there must be

some form of trust, as they have had collaboration for more than 20 year. S1 states that "*trust is not something you get, but something you have to build and maintain*" (S1).

Sako (1997) are distinguished between three types of trust; contractual trust, competence trust and goodwill trust. According to Sako (1997) is contractual trust a shared moral norm of honesty and promise keeping. And according to Buyer 1 - Lead Sourcing Specialist in CC this is not the case here. They always get a signed order confirmation from S1 where they agree on the same delivery date and this is something that S1 often can't keep. Contractual trust also refers to if the other party is willing to carry out its contractual agreements. According to both interviewees from S1 and CC there are no contractual agreements of any future exchanges between the two companies. There used to be an agreement, but this expired a few years ago. The agreement did not include any specifications of equipment that had to be used or that CC was required to use S1, but was rather a framework agreement where both parties agreed on some criteria's. Making a new agreement has been up for discussion several times, but either part has further done no effort. CC is not willing to make a commitment to S1, and states that "*we don't want to make a commitment and invest in a supplier that we don't have 100 percent trust in*" (Buyer 1 - lead sourcing specialist). Thus the contractual trust appears to be low.

Competence trust on the other hand is according to Sako (1997) shared understanding of professional conduct and technical and managerial standards. Competence trust relates to if the other party is capable of doing what it says it will do (Sako, 1997). Competence trust is most suitable to characterize the relationship between CC and S1. As Buyer 1 - Lead Sourcing Specialist says; "*The quality of the parts and services provided from S1 are very high! and there is nothing to say about the quantity*". CC rely on S1's competence and experience, as CC argues that S1 is a "*competent supplier and we trust that they can deliver the quality we expect from them*" (Buyer 1. - lead sourcing specialist). However, Buyer 1 - Lead Sourcing Specialist. Ads "*but we cannot trust that we will get it in the time we need it*". In addition S1 reveals that they see CC as an attractive exchange partner as they provide new and challenging tasks for S1. As both companies possess some competence as the other party values in the exchange relationship, the competence trust appears to be high.

Sako (1997) defines goodwill trust as trust that the other party will make an open-ended commitment to take initiatives for mutual benefit while refraining from unfair advantage

taking. According to S1 they are willing to go beyond their duties of the scope to help CC, as the interviewee from S1 states "*sometimes we do more than we should to get things done*" (S1-). S1 believes that 20 + years of cooperation must reflect on mutual trust between the companies. However CC does not perceive the same level of trust as S1 as the interviewee from CC states that "*in an exchange relationship you have to give and take, but in this case S1 are more willing to take and not give*" (Buyer 2. - lead sourcing specialist). As goodwill trust can only exist when there is consensus on the principle of fairness (Sako, 1997), thus this does not seem to be the case here, and the goodwill trust appears to be medium.

CC is committed to S1 when it comes to the quality to the parts and services they provide. However CC does not indicate any commitment on a company-to-company level, which S1 agrees on. Morgan & Hunt (1994) defines relationship commitment as "the willingness to invest financial, physical or relationship-based resources in a relationship". According to the interviewee at CC, the exchange relationship with S1 is on a "make or break point" (Buyer 1. - lead sourcing specialist). S1 has not done anything to prove that they are willing to improve the relationship. In order for S1 to improve and fulfilling CC's requirements, CC will have to invest resources on training. In the past years CC has invested a lot in the relationship with weekly meetings, training and visits from project quality engineers, sourcing quality managers and commodity managers, but in spite of these efforts S1 continues to "do it their way, and not the way we want it". (Buyer 1. - lead sourcing specialist). However, interviewees at S1 argue that they have made an effort in improving the relationship. When it comes to strategic meetings of future exchanges there have been weekly meetings where expectations and problems have been discussed. However due to the changes in the market, orders have gone down from 30 - 10. Due to this, the meetings have recently been cancelled. The interviewees from S1 states that "we think the cancellation of the meetings were unfortunate, and hope they will continue in the future" (S1-). In addition CC does not share any forecast with S1. S1 explains that they perceive that "CC want a close and good cooperation, but there are some challenges around transparency about forecast and expectations" (-S1). Both interviewees from CC and S1 state several times through the interviews that there are issues with communication in the relationship, regarding misunderstandings and feedback.

In the next section we will follow Liu et al.'s (2010) framework of buyer supplier relationship quality matrix. Lit et al.'s (2010) framework entails categorizing a relationship in a quality

matrix, which is based on the level of trust and commitment present in a buyer-supplier relationship. Liu et al. (2010) then propose how to control the various types of relationships.

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Commitment	Trust (based on Sako 1997)

Thus, the distribution of risk points is as follows:

Total commitment points:	1 pts.	Total trust points:	3 pts.
Efficient inter-organizational communication	Low (0pts)	Goodwill	medium (1pts)
Share forecast of future demand	Low (0pts)	Competence	High (2pts)
Strategic meetings of future exchange	Medium (1pts)	Contractual	Low (0pts)

Table 4-2: classification of commitment and trust

Based on the above allocation of points, we can classify the quality in the relationship by Liu et al. (2010) in terms of level of commitment and trust as follow:



Figure 4-4: Relationship matrix, based on source: Liu et al., (2010)

Based on the classification from above, commitment appears to be low between the companies. The highest score on both trust and commitment are 6 points in each category. In

our distribution of risk points, trust was given 3 points and commitment 1 point. According to Liu et al.'s (2010) quality matrix, the buyer supplier relationship can, based on the medium level of trust, combined with the low level of commitment, be classified as in between type 3; *Arm's Length*, and type 2; *Relier*, which is illustrated in figure 4-4.

The next section of the analysis will explore communication.

# 4.6 Communication

As mentioned in the literature chapter; Good communication can be viewed as a way to improve trust, and is important when evaluating an organization's relationship, as it is critical for an efficient organization and supply chain (Burger et al. 2006, in Ambrose et al. 2008) Both employees from CC and S1 agrees that good communication is one of the key factors for establishing a good buyer-supplier relationship. "*Important to have a close dialogue when the market is as it is today*" (S1). S1 states that "*it is important to have a common understanding, understanding of culture and cultural differences*".

Prahinsky & Benton emphasizes that feedback and communication formality established between the buying firm and the supplier positively influences the buyer-supplier relationship. Both CC and the supplier agrees that there are lack of good communication and feedback in the relationship. S1 states that it is vague with feedback. "When an RFQ (request for quote) is sent out, it had been fine with feedback on whether it has been placed a PO on this order or not, if the PO have been places with someone else and if so, why". "It is important to us to get feedback so that we know what we need to improve on" (-S1)

Prahinsky & Benton suggests that the buying firm establishes an environment conductive to an open dialogue regarding the supplier evaluation and listen to the supplier's suggestion and feedback for performance improvements. The authors further argue that the supplier will then perceive the buying firm to be committed to the relationship and that evidence suggests that suppliers are committed to the buying firm when they perceive the buying firm to be cooperative and committed to them. Buyer 2. - Lead sourcing specialist states that "*up until recently we have had weekly meetings where we have visited them or they have visited us over a longer period without any form for improvement*". Buyer 2 also states that "*S1 are one of*
our scorecard suppliers, which means that S1 are being measured on OTD, quality etc. This gives the supplier feedback on their performance toward us". "S1 receive clear feedback on what we appreciate and what we don't appreciate". - Buyer 1: Lead Sourcing Specialist.

Dyer & Chu (2003) argues that by sharing information, the buyer and supplier firms signal their trustworthiness, as well as demonstrate trust in their partners to behave fairly. Buyer 1 argues that it often is difficult to get information from the vendor. It is also sometimes difficult for the vendor to understand exactly what we want them to do even if it is explained properly. S1 argues that PO's are missing some information. "*There should be a common thread between PO's, FRQ and Quotes. Important that this fits together. This is something that has been raised several times but never acted upon*". (-S1) There is clearly evidence here that there is lack of information sharing between CC and S1. This is probably the main reason for lack of trust in the relationship as Dyer & Chu argues is important for trustworthiness. Buyer 1 argues that information and communication could be improved if S1 become more humble, honest and able to take criticism. S1 argues that CC has to improve their order accuracy and be better on feedback. Eckerd & Hill (2012) argues that a firm might be more willing to share knowledge with its suppliers if it trusts its suppliers.

The next section of the analysis will explore the final buyer-supplier relationship attribute; dependence.

# 4.7 Dependence

As mentioned in the litterateur chapter, Caniels (2007) argue that power and dependence are closely related, and that the buyer's dependence on the supplier is a source of power for the supplier, and vice versa. Buyer 2 argues that the partnership with S1 is more important for us than we want it to be. Buyer 2 also argues that "*they don't have any special products or services who make them have a leverage against us. We have the leverage against them*". (Buyer 2. - lead sourcing specialist). He further explains that CC has plenty of other suppliers to choose from who delivers the same products and services. As Cai, Goh, Souza, & Li (2013) argues that firms will always depend in various degrees on their trading partners. S1 argues that CC is a very important customer for them. "*During the year, CC leaves a few dollars* 

with us. If CC had disappeared there had been a "small hole in the floor", we would have needed a lot of concrete to fill that hole again". (S1) "CC is a large company with most of the suppliers on their list. We have nothing to lose of being on their list, but everything to gain from it." (-S1)

"*CC is a major oil service company and we mention CC proudly*". (S1) However, the interviewee at CC does not believe S1 is that independent of CC. Because CC are in the aftermarket, there are other large customers such as Baker Hughes, Schlumberger and Conoco Phillips that buy much higher volumes, and therefore those companies are more attractive customers (Buyer 1 - lead sourcing specialist). Due to this it appears that S1's dependence on CC are medium-low. Pfeffer and Salanick (1978) argues that because organizations are unique and require different amount of critical resources, the level of dependence will vary across organizations in the exchange relationship. This can be illustrated also in this case, because CC was more dependent on S1 before due to their unique welding procedures. Recently more suppliers have entered this market and can provide the same services, thus S1's welding services are no longer unique and CC can get the same welding procedures elsewhere. Thus it appears that CC's dependence on S1 is low.

To illustrate the level of dependence in the relationship we will use Cox's (2001) power matrix. Cox (2001) argues that based on various power sources one can place the buyer in one of four power positions. Based on the above discussion we found it appropriate to place this relationship in the *independence box*.



Figure 4-5: Cox power matrix, based on source: Cox (2001)

# 4.8 Summary S1

From Kralijc's (1983) product classification analysis we found that the overall purchased products from S1 can be classified as a *leverage product* due to the somewhat high profit impact and low supply risk. According to Caniels and Gelderman (2007) these products can be obtained from various suppliers, and represents a relatively large share of the end product's cost price in combination with relatively low supply risk. Thus, this is in accordance with our market analysis as we found that threats of new entries, threat of substitutes and competitive rivalry were high. When analyzing power in the relationship we found that CC has the power, as the market is now buyer's market and the competition is much higher. We placed the relationship in the *independence box* in Cox's (2001) power matrix as it appears that neither CC is dependent on S1 or S1 is dependent on CC. In the supplier perception analysis we found that the most appropriate box would be the *core box* due to the high attractiveness of account and value of business. When analyzing trust and commitment we found that the buyer supplier relationship can, based on the medium level of trust, combined with the low level of commitment, be classified as in between type 3; Arm's Length, and type 2; Relier in Liu et al.'s (2010) relationship quality matrix. In the analysis of communication we found that there were several issues regarding communication between the parties. CC argues that information and communication could be improved if S1 become more humble, honest and able to take criticism. S1 on the other hand argues that CC has to improve their order accuracy and be better on feedback.

# 5. Analysis Supplier 2

# **5.1 Supplier 2 (S2)**

S2 is a small supplier with 26 employees. They have a sales office in Porsgrunn with three employees and the rest divided between their two offices in Forus, Stavanger. S2 is an actor for a major US company. This company is based in Cleveland and Ohio. S2 has been an actor for them since 1965 and a supplier for Ekofisk since 1970. They operate in several industries, but oil and gas are the largest.

# 5.2 Kraljic phase 1: product classification:

#### **5.2.1** The purchased product profit impact:

The collaboration between S2 and CC started in the 80s. S2 provides products like hydraulic fittings, valves and pipes. The US company S2 are an actor for have patent on one part in a link. They have had the patent on this part since they started in the 1940's. Since, they have continuously expanded this patent. There are other competitors in the market that can provide the same product, but with different designs and quality.

#### Value added to final product:

S2 argues that the product they provide is of a critical character for CC. "*The equipment CC* maintains or creates requires products of quality. Especially when it is for subsea. For example hydraulic fittings, for environmental reasons you don't want to risk any type of leakage in the sea. Is very critical that the product works properly". (S2) However our interviewee from CC argues that "products are important, but they are not business critical". This indicates that the value added to the final product is medium.

#### Volume purchased:

According to the interviewee at S2 the valves they provide can give high volumes in the long run, but they don't give high purchasing volume. S2 does not receive any forecasts from CC, thus they do not know how much they will deliver. The interviewee from S2 argues that this has been up for discussion and can be an advantage for both companies. Interviewee further explains that this could be cost saving for CC, instead of placing one and one order. Forecasting could also lead to better delivery times, as S2 would be able to build storage for CC if they knew the demand. The interviewee from CC argues that they probably could have saved "some pennies" by buying parts through a trading house, which sells in large quantities, as opposed to S2, which only has parts that are made by the US Company they are a actor for. This indicates that the volume purchased from S2 is low.

#### Effect on profitability:

According to interviewee at S2 there are high effects on the profitability of the products provided by S2, as the fittings and valves are essential in order for the drilling equipment to work. However, Buyer 1 - Lead Sourcing Specialist states that "*the products provided from S2 are not revenue critical*". (Buyer 1. - Lead Sourcing Specialist). Thus this indicates that the effect on profitability appears to be low to medium.

#### Impact on product quality:

According to the interviewee at S2, have a reputation for being "state of the art" (S2-). When the products are used under sea, they have to be functional and of good quality. This is also important for environmental reasons, as it is important to avoid problems with leaks because of the hydraulic fittings (S2-). The interviewee at CC argues that quality is important, and states that "*if you cannot get it to the quality you want and delivered on time, the price does not matter*" (Buyer 1. - lead sourcing specialist).

#### 5.2.2 The purchased product's supply risk

#### **Technology requirements:**

According to the interviewee at S2 the products are partially technical advanced. He emphasizes the importance of knowledge and expertise when installing the parts. As interviewees from S2 have explained before, it is important that the parts function properly

because of the environmental impacts. Due to requirements from the Norwegian continental shelf, the technical requirements are high. It therefore appears that technology requirements can be seen to be medium.

#### Number of suppliers:

According to S2 they have only two major competitors in Norway. The interviewee further explains that the competition is a little special for their part. This is because the oil companies only have allowed three manufacturers of clamming fittings on the Norwegian continental shelf. However worldwide the competition is higher. Due to the requirements from CC's engineers, S2 are the only supplier that can provide these products, as they are the only Norwegian agent for the US Company that has patent on these products. This indicates that for CC the number of suppliers available is low, which leads to high supply risk.

#### Substitution possibilities:

S1 are the Norwegian agent for a major US Company that have patent on clamming fittings. Due to requirements of the Norwegian continental shelf there are only a few suppliers that can provide these products. According to the interviewee at S2 there are other suppliers that can provide the same products, but with a different design. However as engineering have decided to use the products provided by the US company S2 are an agent for, CC have to go to S2 in order to get those products as S2 are the only supplier of these products on the "approved vendors list" (AVL), even though competitors do exist. An engineer at CC argues that "compared to a bolt, which you can alter or change if required, valves and fittings are not possible to substitute with anything else" (tools department. - subsea engineer). An alternative for CC could be to purchase the products from Scotland, but due to transportation costs and delivery times, S2 is a better alternative. Thus other types of products cannot substitute the products provided by S2, but alternative suppliers can provide the products. However S2 is the preferred supplier due to the company's location, their expertise and the long history between the companies. Due to this, the substitution possibilities for CC appear to be low.

#### Availability:

Both interviewees at S2 and CC argue that on-time delivery is important. Buyer 1 - Lead Sourcing Specialists: states that one of the advantages of buying from S2 is the short delivery time due to the location. Interviewees explains that there is a difference if CC order, "make to

order" or "make to stock" products. If a PO is placed on a part that is "make to order", the US Company S2 are an agent for will have to custom make this part for CC. If this is the case, the lead-time will be longer than CC had expected. However if the part is from S2's "make to stock" storage, the lead-time is short and the interviewee states "we have a 99% one time delivery performance on these products". Thus it can be argued that the availability of the products is perceived to represent medium risk.

The products purchased from S2 can according to Kraljic's (1983) classification framework, be placed as follows:

Profit Impact		Supply Risk		
			1	
Value added to final product	Medium (1pts)	Availability	Medium (1pts)	
Volume purchased	Low (0pts)	Number of suppliers	High (2pts)	
Effect on profitability	Low/Medium (1,5pts)	Substitution possibilities	High (2pts)	
Impact on product quality	High (2pts)	Technology requirements	Medium (1pts)	
Total risk points	3.5 pts.	Total risk points	5 pts.	

Table 5-1: classification framework S2

The results based on our control questions, can be placed in Kraljic's (1983) matrix in stage one as follows:



Complexity of supply market

Figure 5-1: Product classification matrix, based on source: Kraljic (1983)

Based on Kraljic's (1983) stage one, the purchased product falls into the *Bottleneck category*. This category represents low profit impact and high supply risk. According to Caniels and Gelderman (2007) bottleneck products have less influence on the financial results of a firm. However they are vulnerable with regard to their supply, as suppliers have a dominant power position for these products.

# 5.3 Power in the current relationship

# 5.3.1 Kraljic's (1983) stage 2 combined with Porters' five forces (1979) – market analysis

#### Threats of new entry:

According to S2 "Competition is a bit special for our part, for the Norwegian continental shelf within climbing fittings that are a part of our range, there are only three manufacturers that oil companies allow on the Norwegian continental shelf. Worldwide it is much greater competition than in Norway" (S2) " The firm we are actor for has patented a small part in the coupling, They have had patent since the 40 century. They have constantly expanded this patent so here we are unique" (S2). Due to this patent, the threats of new entry are low.

#### **Buyer Power:**

As mentioned earlier in the analysis of S1, Buyer 1 - Lead Sourcing Specialist. Argues that "When the oil price is high it is suppliers market, but when the oil price is low, as it is today, it is buyer's market". But in this case it's different. Engineering has decided that we should buy parts with the company S2 are an actor for's part numbers. Every time we send them an inquiry we indicate the part number to the company S2 is an actor for. This tells them that they have the power, as they are the only supplier in Norway who provides these parts with their part numbers. (Buyer 1. - Lead Sourcing Specialist) As Buyer 3 - purchaser argues "this is often an annoyance, because we don't have the ability to negotiate better prices" (Buyer 3 - Purchaser) Because of this we will conclude that the buyer power in this case is low.

#### Threats of substitution:

As we have discussed substitution possibilities previously in Kraljic's step 1, there are few or none available alternatives for the product S2 are providing. This means that the threats of substitutes are low. But other suppliers can provide the same products as S2.

#### **Supplier Power:**

According to Porter, markets with few suppliers indicate that the supplier retain the power (Porter, 1979). However, in this case there are only three suppliers that are allowed to provide clamming fittings on the Norwegian continental shelf. Worldwide the competition is much higher. S2 also argues that the competition on valves is much higher. "*There are many providers of this product and the competition are very high. However, this is healthy for the competition because than all suppliers are sharpened and for our customers, the prices are being pressed down. We live well with the competition that is today*". (S2) Because of S2 patent and few suppliers who can provide some of the same fittings as S2 this means that S2 controls the prices in the market and have the power. Engineering has also decided that CC should buy parts with the same part numbers that S2 alone provides in Norway and this is something that S2 are well aware of. So in this case we will conclude that the supplier power is high.

#### **Competitive rivalry:**

When it comes to the competition in the market, we think it depend on the products provided by S2. S2 clearly have the market power in the market when it comes to their patent and also that they are one out of three to be allowed to provide clamming fittings on the Norwegian continental shelf. But when it comes to valves there are a lot more competition in the market. S2 argues that "*I think other suppliers can provide the same type of products as us to CC, I don't know the whole spectrum to the other supplier, but I think it is much the same, just another design. The design might be quite different, if you are ranked 1, 2 or 3 on the quality ladder if I can call it that*" (S2). "We might have an advantage as a provider for a large *worldwide company with a great reputation and known for their good quality products*"(S2). Their power in the market seems to be medium to high.

# 5.4 The supplier perception analysis

S2 argues that CC is a major player in the market and a very important customer. S2 want to be a part of the subsea industry as well as the surface industry and states that "*CC is without a doubt an attractive customer*". In addition S2 argues "*if CC had been our only customer we had been extremely reliant on CC, but we have many customers throughout Norway, up to 1000 as we deliver to both small and large companies in different industries*"(-S2). However, the interviewee at S2 claims "*CC is a very important customer*"(S2.). Due to this the attractiveness of the customer appears to be high. S2 argues that CC are not their largest customer, but not their smallest either. Thus, when it comes to value to business, the market has a large effect on the revenue. The interviewee at S2 explained that the revenue gained from CC could vary widely as it depends on the demands in the market. It therefore appears that the value of business is perceived as medium to low. Based on this, the develop box is the most appropriate.



Figure 5-2: Supplier perception matrix, based on source: Nima.

When putting the supplier perception analysis together with kraljic's framework S2 ends up between bottleneck and development.

	Strategic	Leverage	Routine	Bottleneck
Development	Enable joint continuous opportunities, develop mutual business goals	Encourage supplier to explore opportunities for continuous improvement.	Maintain an open, transparent and basic relationship	Identify areas of mutual dependence
Core	Establish formal policy to enable value a creation and innovation	Establish clear Performance Objectives and Manage political Risks if supplier Change is necessary	Consider bundling if it supports other category strategies	Build and maintain long-term relationships
Nuisance/ Exploit	Rethink relationship, improve standing with supplier rapidly, change internal constraints to allow competition	Seek competition And alternatives, Supplier change To be considered	Seek alternatives, monitor as required	Explore option to change supplier or specifications, ensure assurance of supply
	Structure closely Aligned relationship to Maximize value	Monitor and seek to increase competition	Develop alternative Supply options	

Figure 5-3: Combination of the supplier perception analysis and Kraljic's (1983) product classification matrix, based on source: Nima.

# 5.5 Trust and Commitment

As mentioned under the analysis of trust and commitment in the relationship between CC and S2, satisfaction is an important variable for trust (Zineldin & Johnsson, 2000). In this case, CC is very satisfied with the services S2 provides. The interviewee states that they are confident that S2 will deliver what they promise and when they promise. He further explains that CC are so pleased with S2's delivery times, that supplier measurements such as scorecard are not necessary. The interviewee from CC also states that he perceive the trust between the supplier and CC as high. This is supported by the interviewee from S2 that argues that he believes that CC are satisfied with their work as the lead-times are short and the one-time delivery are good.

According to S2, they do not perceive any problems with the trust as the two companies have a long history of collaboration, and a good dialogue. Several scholars argue that trust can be conceptualized as a substitute for various governance mechanisms, as self-enforcing safeguards such as i.e. relational trust are more effective and less costly means of safeguarding transactions. (Williamson, 1985; Sako, 1997). In this relationship this seems to be the case, as it appears from both interviewees from CC and S2 that there are no need for contracts, as the relational trust is high. According to the interviewee at S2, CC is not committed to S2, unless CC wants to be. He explains that in the aftermarket business, the actors usually can decide for themselves who they will use, "*so that CC's engineers have decided to use products that only S2 provides, is a sign of trust in us as suppliers*" (S2).

As mentioned before, Sako (1997) distinguished between three types of trust; contractual trust, competence trust and goodwill trust. We will analyze the levels of trust in the relationship between CC and S2 based on these factors. Contractual trust is defined by Sako (1997) as a shared moral norm of honesty and promise keeping. According to CC, S2 always delivers what they promise, and if there are any hold ups they are honest and always give information about this in advance. Thus, the contractual trust appears to be high.

Competence trust is according to Sako (1997) shared understanding of professional conduct and technical and managerial standards. As mentioned before, the interviewee at S2 argues that because CC has chosen to use S2 as a supplier, this indicates that CC is satisfied with their work and capabilities to perform. The interviewee at CC state that "*S2 delivers products of good quality and have a good one time delivery*" and that S2 is "*a good supplier for CC*". As competence trust relates to if the other party is capable of doing what it says it will do (Sako, 1997), it appears that the competence trust between CC and S2 are high. Sako (1997) defines goodwill trust as trust that the other party will make an open-ended commitment to take initiatives for mutual benefit while refraining from unfair advantage taking. Dyer and Chu (2000) defines trust as "one party's confidence that the other party in the exchange relationship will not exploit its vulnerabilities", which puts emphasis on confidence on the other party. The interviewee from CC states "S2 are very service minded, and has not put us in any difficult situations even though they have the power"(Buyer 2. - lead sourcing specialist). He also states that CC trusts the supplier. Thus, the confidence in S2 appears to be high.

The interviewee from CC states that; "S2 do not abuse the power they have over us". This indicates that CC perceives S2 to have goodwill toward them. As Interviewees from S2 have stated that "CC is not committed to S2, unless CC wants to be, thus this is a sign of faith in us

*as their supplier*", it appears that S2 perceives CC to have goodwill trust toward them as well.

Commitment is defined as the belief that trading partners are willing to devote energy to sustain the relationship (Dion et al., 1992). The interviewee at S2 explains that because of turnover in GE, many people that they used to engage and communicate with are now gone. "*Because of this we do not know you as well as we used to*" (S2). He further argues that this is something S2 want to improve and that they are willing to invest time in "*getting to know you better*"(S2-). Some of the initiatives S2 are willing to invest in are visits, inviting CC to their location and competence building through seminars and courses. The interviewee at CC states that he believes the cooperation with S2 will last, and that they are willing to invest in the relationship. He further explains that measures CC have done are one site visits. In addition commitment can also be illustrated as both interviewees at S2 and CC mentioned that currently they are in a process of attaching their part numbers together on the delivery parts. When it comes to share forecasts, S2 does not receive any, but according to the interviewee at S2 this has been up for discussion.

Commitment		Trust (based on Sako 1997)	
Strategic meetings of future exchange	Medium (1pts)	Contractual	High (2pts)
Share forecast of future demand	Low (0pts)	Competence	High (2pts)
Efficient inter-organizational communication	High (2pts)	Goodwill	HIgh (2pts)

Thus, the distribution of point is as follows:

Table 5-2: classification of commitment and trust

3 pts.

**Total commitment points:** 

Based on the above allocation of points, we can classify the quality in the relationship by Liu et al. (2010) in terms of level of commitment and trust as follow:

**Total trust points:** 

6 pts.



Figure 5-4: Relationship matrix, based on source: Liu et al., (2010)

Based on the discussion above, commitment appears to be medium, and trust appears to be high. According to Lui et al.'s (2010) quality matrix, the buyer-supplier relationship can be classified in between type 2; *Relier,* and type 3; *Buddy,* which is illustrated in figure 5-4.

The next section of the analysis will explore communication.

# **5.6** Communication

As mentioned earlier, feedback and communication formality established between the buying firm and the supplier positively influences the buyer-supplier relationship (Prahinsky & Benton). Prahinski & Benton (2004) argues that communication can be explained based on content; the message being transmitted, medium; the method used to transmit the content, and feedback; the two-ways communication between the firms.

S2 argues that communication is a key to a well-functioning buyer-supplier relationship, as it is crucial in order to achieve good results.

Communication is also emphasized by CC to be essential to a good buyer-supplier relationship. According to the interviewee at S2 there is a good dialogue between the companies, and emphasizes that there are regular contact between the two parties. However, *"due to a busy schedule, it is not always possible to get contact immediately or arrange meetings*"(S2-). S2 argues that communication is critical in this industry, especially regarding technical parts, as it is important to understand each other's requirements. The interviewee at S2 state that there have been some issues due to misunderstandings regarding documentation requirements and codes in the purchasing process. However the interviewee further explains that if they have questions or something is unclear, there is usually no problem getting replies from CC. He emphasizes the importance of being available for inquires if something's are unclear, and adds that they are available for CC 24 hours. The interviewee at CC describes S2 as "upfront", as they always inform about hold ups and delays (Buyer 2. - lead sourcing specialist).

The main communication medium CC uses is SIMON, which is an electronic system used as a two-ways communication tool. It is in SIMON that CC sends out the request for quotation and pricing, where S2 reply with their quotes. It is also in SIMON CC sends out the purchase orders, in addition to technical inquiries regarding the products. According to S2 most of the communications between the companies are through SIMON or mail.

S2 argues that they do not receive any feedback from CC on how they are rated and performing. However this is something S2 would challenge CC to introduce, as the interviewee argues that receiving feedback on performance is a good way to "*sharpen the suppliers*" (S2-). He further argues that they would appreciate ratings and feedbacks on their performance. The interviewee at CC explains that when S2 continue to get PO's, "*this is a good sign*" (Buyer 1. - lead sourcing specialist), and further argue that he believes the communication is good as it is and does not need much improvement. He explains that CC have used scorecards on some supplies, but emphasizes that there is no need for CC to use scorecards on S2 as CC is satisfied with their performance and one time delivery. According to CC the feedback received from S2 are order confirmations.

# **5.7 Dependency**

Caniels (2007) argues that dependency is determined by the degree in which alternative providers of this resource are at hand. The interviewee at CC argues that they are dependent on S2 because they are the only Norwegian agent for the US company that CC's engineers have decided to use. As mentioned before under the analysis of the purchased product's supply risk, there are few suppliers that can provide these products. Thus, S2 argue that they have only two competitors in Norway that can provide the same products to CC. This indicates that the supply risk is high, and there are few alternative provider of this resources at hand. As we concluded in the analysis of power, the buyer power in this case is low and it is the supplier that has the bargaining power because of their patent on clamming fittings.

According to S2, CC are not one of their largest customers, but describes CC as a "mid-range customer" (S2-). S2 states that "*if CC had been our only customer, we would have been extremely dependent on CC*", however, S2 have customers in several industries around the country, thus they are not solely dependent on CC. However, S2 sees CC as an very attractive customer as they are a large actor in the oil and gas market. The interviewee at S2 states that they will be like to be apart of the subsea industry and not only onshore, thus, they see CC as an interesting customer, and would like to continue the cooperation in the future. We will therefore conclude that CC is more dependent on S2 due to their patent on the clamming fittings and few alternative suppliers. S2 on the other hand does not appear to be that dependent on CC as they have many customers in several industries as well.

To illustrate the level of dependence in the relationship we will use Cox's (2001) power matrix. Based on the above discussion we found it appropriate to place this relationship in the supplier dominance box.



Figure 5-5: Cox power matrix, based on source: Cox (2001)

# 5.8 Summary S2

To summarize the analysis of the relationship between CC and S2 we found that the purchased product from S2 falls into the *Bottleneck category*. This category represents low profit impact and high supply risk. Bottleneck products have less influence on the financial results of a firm, but are vulnerable with regard to their supply. In the market analysis based on Porter (1979) and Kraljic (1983) we found that due to S2's patent the threats of new entry are low. We also found that means that the threats of substitutes are low as there are few or none available alternatives for the product S2 are providing. When it comes to power, it appears that S2 has the power, as CC is more dependent on them. Due to S2's patent and few substitution possibilities for CC the supplier power is high in this relationship. Thus, the relationship was placed in the *supplier dominance box* in Cox's (2001) power matrix. In the supplier perception analysis we found the *develop box* to be the most appropriate as attractiveness of customer is perceived as high and value of business perceived as low. In the analysis of trust and commitment we found that commitment appears to be medium, and trust appears to be high. According to Lui et al.'s (2010) quality matrix, the buyer-supplier relationship can then be classified in between type 2; *Relier*, and type 3; *Buddy*.

Finally when analyzing communication, we found that both S2 and CC where mostly satisfied with the communication, but S2 would appreciate feedback on their performances as there is currently no feedback from CC on this. Most of the communication between the companies is through the electronic communication system SIMON or mail.

# 6. Discussion

In this research, we have evaluated two buyer-supplier relationships, where the focal firm is CC, a worldwide oil service company that operates in the oil & gas industry. The oil and gas industry has been categorized as an industry with high uncertainty, high cost levels, technological complexity and long lead-times (Olsen, 2005). Thus, effective supply chain management is especially important, as companies are dependent on their suppliers to deliver on time, to right prices and right quality. The focal firm is referred to as a "service company", providing products and services to the big oil companies. Due to the criticalness of the products and services provided by CC, CC is highly depending on its suppliers for optimal performance. Due to the fall in oil prices, there has been a rapid change in the oil and gas market the past year, not only in Norway, but worldwide. The oil companies have been challenged to come up with new solutions and cost cuts in order to sustain profitable. As mentioned in the introduction chapter, supply chain management is an emerging topic, which emphasize the importance of focus on the whole supply chain, rather than just focusing on the focal firm.

Our purpose with this thesis is to investigate the phenomenon of how a buyer supplier relationship in the oil industry is affected by today's oil and gas market. The research question for this thesis is: *"how is the buyer-supplier relationship between an oil service company and its two suppliers affected by today's oil and gas market?"* In order for us to investigate this phenomenon and answer our research question, we have used the relationship between an oil service company and two of its suppliers to gather relevant data for our case study. Based on the spend report for 2014 and collaboration with our case company, we decided upon two suppliers, which were perceived as critical to CC's business. We conducted interviews with representatives from both CC and the two suppliers in order to get perspectives from both sides.

The oil and gas industry are as previously mentioned, experiencing low profitability as projects are put on hold and suppliers are "fighting for contracts". According to buyer 1 (lead sourcing specialist), the entire market is currently in a "savings mode". Due to this, CC's customers have decided that CC should cut costs by 20 %. Because the market currently is in a "savings mode", the first priority is manly to save costs. Because of this "crisis", conditions

have changed for both suppliers and buyers as all actors are trying to adapt to this new market situation. As we will investigate how the market affects the buyer-supplier relationship, we sough to investigate how the current relationship between CC and the two suppliers are and how the current market situation is.

To answer our main research question we found it useful to create three sub questions:

- 1. How is the current relationship between CC and the supplier?
- 2. How is the current market situation?
- 3. Is the relationship affected by the current market situation?

To answer our first sub question: How is the current relationship between CC and the supplier?, we have analyzed the relationship based on the features trust, commitment, power, dependency and communication as these are viewed as key features in a relationship (Ambrose et al., 2008). By using Liu et al.'s framework, we identified the level of trust and commitment present in the two dyad relationships. We also analyzed communication, thus, this can affect the level of trust and commitment in the relationship (Eckerd & Hill, 2012). Based on our analysis, the relationship with S1 fell between the "relier" and "arm'slength" boxes. This was based on low level of trust as well as low commitment present in the relationship. According to Liu et al. (2010) parties in this type of relationships care little about their partner's feelings, are unwilling to sacrifice their own interests, and don's wish for longterm cooperation. Liu et al. (2019) describes "arm's-length" relationship as the worst type of relationship and often the reason why cooperation between partners fail. Thus, this seems to be the case for the relationship between CC and S1 as the interviewee at CC argues that their relationship is on a make or break point. The perception of trust in the relationship appears to be somewhat different amongst CC and S1, as CC state that the trust is low due to S1's abuse of power and low satisfaction with one time delivery. S1 on the other hand state that the trust is high due to the long cooperation amongst the companies. The commitment in this relationship is low as there is no future exchange of forecasts and the weekly meetings have recently been cancelled. According to Grayson & Ambler (1999) some buyers in mature relationships gradually develop the belief that a supplier is taking advantage of the trust and is acting opportunistically. Based on our analysis this seems to be the case in the relationship between CC and S1, as the interviewee at CC states "S1 are more willing to take than give

*something back*" (Buyer 1 - lead sourcing specialist). According to S1 the trust in the relationship is high because of their company's long history of cooperation. However according to CC the relationship between the companies has been more "chilly" recently.

The dyad relationship with S2 represents high trust as well as medium commitment, which led to the classification of S2 into a combination of "relier" and "buddy" boxes. As both interviewees from CC and S2 argues that they have a good cooperation and are willing to invest in the relationship, the long-term prospects for this relationship are positive. Liu et al. (2010) describe type 1: Buddy as a cooperative relationship that many partners seek. In addition the author state that a "relier" type of relationship has great potential for realizing the transformation from "relier" type to "buddy" type over time as mutual trust established between the parties over time could generate mutual commitment. More commitment during more frequent communication and meetings, as well as forecasts is something that has been up for discussion between the two parties. If these are measures that both companies are willing to take, the relationship between S2 and CC will probably transform to a "buddy" type in the future, as commitment will increase.

Good communication can be viewed as a way to improve trust, and is important when evaluating an organization's relationship, as it is critical for an efficient organization and supply chain (Burger et al. 2006, in Ambrose et al. 2008). Both interviewees from CC and S1 agreed that communication was an important factor in a buyer-supplier relationship, however both CC and S1 argued that there are problems with the communication in the relationship. Prahinski & Benton (2004) argues that the supplier will perceive the buying firm to be committed to the relationship if the buying firm listens to the supplier's suggestion and feedback for performance. As both CC and S1 agrees that there are lack of good communication and feedback in the relationship. From the analysis we found that there are also lack of information sharing between CC and S1. As Dyer & Chu argues that communication has an effect on both trust and commitment, this might be one reason why the trust and commitment in the relationship between CC and S1 is perceived as low.

In the relationship between CC and S2, both interviewees argue that the communication is mostly good, but with minor issues that can be improved. Expect some minor misunderstandings regarding documentation requirements and codes in the purchasing process, both CC and S2 agrees that the communication between the companies are good and if there are any problems or misunderstandings, there is usually no problem getting repliers and that both companies are available for inquires if something's are unclear. Evidence have shown that suppliers are committed to the buying firm when they perceive the buying firm to be cooperative and committed to them (Prahinski & Benton, 2004). As there is currently no form for feedback from CC on S2's performance, this is something that probably could increase S2's perception of CC's commitment and thus increase the commitment in the relationship.

When analyzing the relationships based on dependency we found it appropriate to place the relationship between CC and S1 in the "*independence box*". From the analysis it appears that CC are not that dependent of S1 as they used to be, as new suppliers now can provide the same welding procedures. Those welding procedures were initially unique for S1, and gave them more bargaining power towards buyers as CC. However, due to changes in the market and new competitors this bargaining power are now reduced and CC are no longer dependent on S1 to provide those services. In addition S1 states that CC are a large and attractive customer, however they have other large customers as well, which buys higher volumes. This indicates that S1 are not dependent on CC, but they emphasize that they see CC as an attractive customer and wants to maintain the cooperation.

The interviewee explained this was because S1 are not willing to adapt to the new market situation, as the prices and costs are now in much more focus than it used to be. S1 argues that they have been reducing prices. From the analysis, it appears that S1 does not understand that the market have gone from suppliers market to buyers market. S1 describes CC as a loyal and profitable customer. From the analysis we conclude that S1 does not see the realism of today's market change, it seems like they want to continue the trend with increasing prices as they have the past years. S1 have been able to do so, due to CC's loyalty and how much they chorus their unique welding procedures. But as mentioned before, the market has changed, cost savings has become more in focus and new suppliers have been conceded on the pitch. There are more suppliers that can offer the same services and products as S1 with the same unique welding procedures. We conclude that it seems like S1 has seen itself as a bottleneck supplier for CC, or at least wanted to be a supplier CC are more dependent on. However, we found in our analysis that S1 can be classified as a leverage supplier for CC. As the costs of switching to other suppliers is low. CC is not that dependent on S1 as they used to be.

In our analysis of the relationship between CC and S2, we found that CC is more dependent on S2, as the relationship was placed in the *"supplier dominance"* box in Cox's (2001) power matrix. Due to S2's patent, CC is more dependent on S2's products than on S1's services and products. In this relationship the supply risk is high as there are few alternative suppliers that can provide the same parts as S2 are the only Norwegian agent for the part numbers that CC's engineering have decided to use. This indicates that CC's dependency on S2 is high. It became clear that this is something S2 is aware of. However as stated in the interview from CC, this dependency is something S2 have not exploited as they have never put CC in any difficult situations.

From the analysis on trust, commitment and dependency in the relationship between CC and S1, we conclude that there is a difference in the opinions regarding the current relationship level between the companies. It clearly states from the analysis that S1 is willing to continue to invest a lot in improving the relationship with CC. In addition CC argued that they have used a lot of time and resources on weekly meetings with S1 in order to improve the relationship as well as performances. However, CC does not believe these measures have led to satisfying improvements. Due to the new focus on cost savings, CC believes that the relationship is on a "make or break" point. If they continue the cooperation they will have to invest more in the relationship, and S1 have to be more willing to adapt to the new market situation and reduce prices. However, because the situation and competition in the market is as it is, the switching costs for CC to change suppliers are low.

From the analysis of these key features in the relationship between CC and S2, the relationship appears to be strong, as trust, commitment and communication is perceived as good. Even though S2 is in the supplier dominance box due to their patent, they have not used CC's dependency against them and put CC in any difficult situations. Even though there is always room for improvements, we perceive both CC and S2 to be very satisfied with their cooperation and the relationship. Both CC and S2 states that they believe their cooperation will continue in the future and that both are willing to invest in the relationship.

To answer our next sub-question; "*How is the current market situation?*" we wanted to investigate the market and the industry the companies operates in. In our interview guide we structured our first questions as to get a deeper understanding of the industry, competition and products the suppliers provide. However, due to all the recent attention about the changes in the oil and gas industry, we felt it appropriate to add additional questions regarding

competition and marked today compared to before. We were well aware of the possibility that the answers we got now, could have been different if we conducted the interviews a year ago. As our interview was semi-structured this made it possible for us to ask follow-up questions.

As recently discussed, the market is in a savings mode and cost saving are in focus. As mentioned in the introduction, May last year, no one predicted layoffs in thousands and spending cut worldwide. Few months later got started on a humble drop in oil prices, which did not stop before oil prices were halved. The past year has been a mildly troublesome year for oil producers worldwide. In July 2014, the prices of a barrel of North Sea oil at \$ 110, in January 2015 the price were down to \$ 50 a barrel. Due to this, CC has to adapt to this new situation and their customers demands to save costs. As the oil prices has been high for many years now, there has been a good market for suppliers as it is suppliers market when the oil price is high. However, when the oil price fell, this has led to a shift from suppliers market to buyers market. It is now mostly the buyers that have the bargaining power, as projects are put on hold and the large oil contractors demand cost savings. Due to the uncertainty on future contracts, and decrease in workload the competition amongst suppliers are harder and price is now even more important than before.

By analyzing the two dyad relationships from Porter's (1979) five forces, we found that the barrier of entry in the market for S1 were low and the competition high. Also the buyer power was high, and the supplier power low, thus this is in accordance with the affect the low oil price has on the market. In S2's case the barrier of entry were high and the competition low as only three other Norwegian companies could provide some of the same products/services. However, in this case the buyer power is low, while the supplier power is high.

To gain an understanding of the organizations position in the market form the supplier's point of view we used the supplier perception analysis. Here we found that the relationship between S1 and CC would be placed in the core box due to the high value of business and CC's high attractiveness. This indicates that from S1's point of view the relationship with CC should be defended vigorously and that they should try to maintain a long-term relationship. The relationship with S2 and CC were placed in the develop box as the attractiveness were perceived as high, and the value of account perceived as medium to low. This indicates for S2's point of view it would be beneficial to nurture and possibly expand and develop business together. However, due to the medium to low level of value of business, S2 should also seek opportunities. As S2 is operating in several industries and not just the oil industry, the changes in the market have not affected their business in such degree as if their main business were generated from the oil and gas industry.

By answering the two first questions we can now answer our last question that results in our main research question; *"How is the buyer-supplier relationship between an oil service company and two of their suppliers affected by today's oil and gas market?"*.

From our analysis we found that the relationship between CC and S1 were clearly affected by today's market situation. However, the relationship between CC and S2 did not appear to be affected by the market. By using Kraljic's (1983) portfolio matrix we found that S1 was a "leverage" supplier, whereas S2 were classified as a "bottleneck" supplier. Because S1 was categorized as a leverage supplier, this indicates that CC can exploit its purchasing power and select among vendors. From our analysis we found that S1 have previously been viewed as a bottleneck supplier, as the supply alternatives were fewer before and thus the supply risk were higher. It appears that S1 still see themselves more as bottleneck suppliers and will not accept that their power over CC has diminished as they now can be categorized as a leverage supplier. S2 is categorized as a bottleneck supplier, thus the supply risk is high but importance of purchasing not that high. In this relationship S2 have more power over CC as the supply risk is high and there are few alternative suppliers. Following is a figure that demonstrates the categorization of the two suppliers:



Figure 6-1: Product classification, based on source: Kraljic (1983)

The results from Kraljic's stage 2, market analysis, combined with Porter's five forces showed that one of the relationships have been affected by the market as the power has shifted from supplier power to buyer power. This is the case for the relationship between S1 and CC. There are now several suppliers who can offer the same type of services and products as S1, and the competition is much higher. This makes it easier for CC to switch suppliers, which makes supply risk low. This indicates that CC has more power over S1 than the other way around in today's market.

In the dyad relationship between S2 and CC, we found the opposite. In this relationship, S2 has the power over CC due to their patent and CC's engineer's decision of using this particular part number, as S2 are the only provider in Norway. This makes CC more locked to this particular supplier. In this relationship we conclude that supplier power are stronger than buyer power in this relationship. Following is a figure that illustrates the categorization of the two suppliers in combination with the power line that illustrates the power in the relationship:



Figure 6-2: Product classification and power line, based on source Kraljic (1983) and Nima.

As one can see from figure 6-2, the buyer has the power when the supplier is a leverage supplier, as S1, whereas the supplier possesses the power when the supplier is categorized as a bottleneck supplier as S2.

# 7. Conclusion

Our conclusion is that the relationship between S1 and CC has changed as a result of the current market situation. This is mostly because the power balance in the relationship has changed. However, the relationship between S2 and CC has not changed. As previously discussed we found that CC and S2 have a mutually beneficial relationship with potential to realize the transformation into a "buddy" relationship, which many partners seek. The relationship between CC and S1 were classified in between an "arms-length" and "relier" relationship. This is described as the worst type of relationship and is often the reason why cooperation between partners fails. Thus, this appears to be the case in this relationship. Trust, commitment, dependency, communication and power have all an effect on a relationship in varying degrees. In the relationship between S1 and CC trust and commitment have been affected because S1 previously has exploited their power by taking advantage of CC's dependency. In contrast, S2, which also has power over CC, as CC is dependent on them, have not taken any advantages of this power. Thus, the trust and commitment between S2 and CC are higher, as neither of the parties have acted opportunistically, or fear that the other party will do so.

In our case we have two different buyer-supplier relationships where one relationship is cooperating well and trust and commitment is high. Both S2 and CC describe the relationship as well functioning relationship with long time prospects for future cooperation between the companies. Independent on the market situation, both parties in the relationship are satisfied with the relationship and wishes to continue the cooperation. S2 have the power in the relationship due to their patent, even though the market has changed to buyers market. Thus, the power line in this relationship has not shifted as S2 are still seen as a bottleneck supplier.

On the other side we have the relationship with CC and S1, which are on a make or break point, as years of investing in the relationship has not led to where CC wants them to be. As we interviewed both representatives from CC and S1 we understood that this relationship had experienced difficulties for a long time, and satisfaction with the current relationship is low, especially from CC's perspective. However, it seems that S1 perceives maintaining the relationship as more attractive than CC as the relationship were placed in the core box in the supplier perception analysis. The cost savings priority have led CC to make a decision whether to invest more in the relationship or to end the collaboration with S1. Due to the lack of work and harder competition, this have given CC the opportunity to investigate if the relationship is worth continuing or if it would be more beneficial to switch to alternative suppliers that can deliver the same products. In this case we conclude that the combination of a struggling relationship, combined with the switch of power due to the market change have led CC to investigate other suppliers as alternatives as the market is now buyers market and suppliers are fighting for contracts. Thus, there has been a negative effect on the relationship between CC and S1. If the market had been suppliers market as it was before, S1 would have more power over CC and CC would probably be more willing to invest in the relationship if the supply risk was higher and they were more dependent on S1's services.

Based on our case analysis we conclude that the relationship between CC and S2 have not been affected by the market situation. The dependency and power balance between CC and S2 has not changed due to the market situation even though it is buyers market. The relationship with CC and S1 on the other hand, has been affected as the power balance has shifted from supplier power to buyer power. Because S1 is categorized as a leverage supplier, but before the market became a buyer market, there were fewer suppliers to choose from and S1 extended more towards a bottleneck supplier. In this case it clearly states that the relationship between CC and S1 have been affected by todays oil and gas market, as the change in the power from supplier power to buyer power have created basis for CC to leverage the supplier's performance on quality and/or especially in this case, cost improvements.

Based on these findings we conclude that a good and well functioning buyer-supplier relationship is important in order to face challenges in the market. If both parties are satisfied with the relationship, the parties are more willing to invest in the relationship. We found that power imbalance is not necessarily a barrier to the formation of close and successful relationships, which is supported by Corsten & Kumar (2005). However, as stated by Belaya et al. (2009), if one party exploits its power, this can be damaging to the relationship and can result in less commitment and trust from the other party, which was the case for the relationship between CC and S1. This implies that suppliers should be careful to exploit its power if their objective is to maintain a long-term relationship with its buyers.

Communication where mentioned by all interviewees as an important factor in a buyersupplier relationship. In the relationship between S1 and CC there was some issues regarding communication and sharing of information, thus poor communication could be one reason for the low level of commitment and trust in the relationship. As communication has an effect on trust and commitment (Dyer & Chu, 2000), one managerial implication for both suppliers and buyers could be to focus on god and well-functioning communication channels between the parties in the relationship by establishing feedback and communication formalities between the buying firm and the supplier. These findings may be similar for other buyer-supplier relationships as well, but as this is a case study, we cannot generalize and say with certainty that this will be true for other cases (Yin, 2014). Further we will elaborate on further research and outlook:

#### 7.1 Further research and outlook

When working with this thesis, we found several topics that could be interesting to investigate for further research in regards to CC. It could have been interesting to look into the effects of improving buyer-supplier relationships. Buyer-supplier relationships are widely emphasized in literature; however, we found little literature evaluating the effects of improved buyer-supplier relationship. Thus, to analyze the process of transforming from an "arm's length" relationship to a "buddy" relationship would also be interesting for further research.

It could also be beneficial to analyze a larger sample of relationships, and not only a limited selection of key suppliers. In this way, it could be possible to generalize how CC is treating their suppliers to a greater extent. It could also be interesting to look more into today's oil & gas marked.

In order to get more honest answers from the respondents in the future, we think that it could be interesting to conduct an anonymous survey in addition to conducting interviews.

# References

Ambrose, E., Marshall, D., Fynes, B., & Lynch, D. (2008). Communication media selection in buyer-supplier relationships. *International Journal of Operations & Production Management* (4), ss. 360-379.

Anderson, E., & Weitz, B. (1992). The use of pledges to build and sustain commitment in distribution channels. *Journal of Marketing Research* (1), ss. 18-34.

Arnold, U. (2000). New dimensions of outsourcing: a combination of transaction cost economics and the core competencies concept. *European Journal of Purchasing & Supply Chain Management* (1), ss. 23-29.

Belaya, V., & Hanf, J. (2009). A multi-theoretical perspective on power in managing interorganizational relationships. *International Journal of Social Economics* (11), ss. 1040-1049.

Bierstedt, R. (1950). An analysis of social power. *American Sociological Review* (6), ss. 730-738.

Brown, J., Lusch, R., & Nicholson, C. (1995). Power and relationship commitment: their impact on marketing channel member performance. *Journal of Retailing* (4), ss. 363-392.

Cai, S., Goh, M., Souza, R., & Li, G. (2013, April). Knowledge sharing in collaborative supply chains: twin effects of trust and power. *International Journal of Production Research* (7), ss. 2060-2076.

Caniels, M., & Gelderman, C. (2007). Power and interdependence in buyer supplier relationships: A purchasing portofolio approach. *Industrial Marketing Management* (36), ss. 219-229.

Cousins, P. (2002). A conceptual model for managing long-term inter-organizational relationships. *European Journal of Purchasing & Supply Management Vol. 8*, s. 71.82.

Cousins, P. L. (2008). *Strategic Supply Management - principles, theories and practice.* Pearson Education Limited.

Cox, A. (1999). Power, value and supply chain management. *Supply Chain Management: An International Journal* (4), ss. 167-175.

Cox, A. (2001). Understanding buyer and supplier power: A framework for procurement and supply competence. *Journal of Supply Chain Management* (2), ss. 8-15.

Dekker, H. C. (2003). Value chain analysis in intefirm relationships: a field study. 1-23.

Dyer, J., & Chu, W. (2000). The determinants of trust in supplier-automaker relationships in the U.S.; Japan and Korea. *Journal of International Business Studies* (2), ss. 259-285.

Dyer, J., Cho, D., & Chu, W. (1998). Strategic Supplier Segmentation: The next "best practice" in Supply Chain Management. *California Management Review* (2), ss. 57-77.

Eckerd, S., & Hill, J. (2012). The buyer-supplier social contract: information sharing as a deterrent to unethical behaviors. *International Journal of Operations & Production Management* (2), ss. 238-255.

Eisenhardt, K. (1989). Agency theory: An assessment and review. *Academy of management review* (1), ss. 57-74.

Ellram, L. (1996). The use of the case study method in logistics research. *Journal of business logistics* .

Emerson, R. (1962). Power-dependence Relationships. *American Sociological Review*, ss. 31-41.

Fisher, M. J. (1994). Making Supply Meet Demand in An Uncertain World. 83-93.

Fletcher, R. (2008). The internationalisation from a network perspective: A longitudinal study. *Industrial Marketing Management*, ss. 952-964.

Ford, D. G.-E. (2003). *Managing business relationships* (2nd ed. utg.). Chichester, England: John Wiley & Sons Ltd.

Gadde, L.-E. H. (2010). *Supply Network Strategies* (2nd ed.. utg.). Chippenham: John Wiley & Sons Ltd.

Ganesan, S. (1994). Determinants of Long-Term Orientation in Buyer-Seller Relationships.

gass, N. o. (u.d.). *www.verdensklasse.no.* Hentet 03 08, 2015 fra www.verdensklasse.no: www.verdensklasse.no/fakta/?id=765&t=Betydningen-for-samfunnet

Government.no. (2014, 08 22). The service and supply industry. *The serivce and supply industry* .

Gulati, R., Nohria, N., & Zaheer, A. (2000, March). Strategic Networks. *Strategic Management Journal* (3), ss. 203-215.

Gunasekeran, A., Patel, C., & Tirtiroglu, E. (2001). Performance Measures and Metrics in A Supply Chain Enviroment. *International Journal of Operations and Production Management*, ss. 71-87.

Gundersen, N., & Lundberg, N. H. (2014, 03 06). *www.snl.no*. Hentet 03 08, 2015 fra www.snl.no/petroleum: www.snl.no/petroleum

Halldorsson, A., Kotzab, H., Mikkola, J., & Skjøtt-Larsen, T. (2007). Complementary theories to supply chain management. *Supply Chain Management: An International Journal* (4), ss. 284-296.

Hoppner, J., Griffith, D., & Yeo, C. (2014). The interwined relationships of power, justice and dependence. *European Journal of Marketing* (9/10), ss. 1690-1708.

Institute, A. P. (u.d.). www.api.org. Hentet fra www.api.org/oil-and-natural-gas-overview

Jacobs, D. (1974). Dependency and Vulnerability: An Exchange Approach to Control of Organizations. *Administrative Science Quarterly*, ss. 45-59.

Janvier-James, A. (2012, January). A new introduction to supply chain and supply chain management: Defenitions and Theroies perspectives. *International Business Research* (No. 1), ss. 194-207.

J.K. Shank, V. G. (1992). Strategic cost management: the value chain perspective. 177-197.

Jeffries, F., & Reed, R. (2000). Trust and Adaption in Relational Contracting. *Academy of Management Review* (4), ss. 873-882.

Kraljic, P. (1983). Purchasing must become supply management.

Kvale, S. (1996). *InterViews - An introduction to Qualitative Research Interviewing* (1 st. edition. utg.). SAGE Publications Inc.

Lambert, D., & Cooper, M. (2000). Issues in supply chain management. *Industrial marketing management* (No. 29), ss. 65-83.

Lambert, D., Cooper, M., & Pagh, J. (1998). Supply chain management: implementation issues and research opportunities. *The International Journal of Logistics Management* (No.2), ss. 1-19.

Liker, J., & Choi, T. (2004, December). Building Deep Supplier Relationships. *Building Deep Supplier Relationships*, *82* (12), ss. 104-113.

Liu, Y., Li, Y., & Zhang, L. (2010). Control mechanisms across a buyer-supplier relationship quality matrix. *Journal of Business Research* (1), ss. 3-12.

Maloni, M., & Benton, W. (2000). Power Influences in the Supply Chain. *Journal of Business Logistics* (1), ss. 49-73.

Mentzer, J., Dewitt, W., Keebler, J., Min, S., Nix, N., Smith, C., et al. (2001). Defining supply chain management. *Journal of Business Logistics* (No.2), ss. 1-26.

Mohanty M. K., G. P. (2012). Buyer Supplier Relationship in Manufacturing Industry-Findings From Indian Manufacturing Sector. *Business Intelligence Journal*.

NIMA. (u.d.). CIPS Advenced Practitioner - Module 3: Supplier Management in Oil and Gas . Chartered Institute of Purchasing & Supply.

Olsen, B. H. (2005, Jan). Governance of complex procurements in the oil and gas industry. *Journal of Purchasing and Supply Management* (1), ss. 1-13.

Paulraj, A., & Chen, I. (2007). Envorimental uncertainty and strategic supply management: a resource dependence perspective and performance implications. *Journal of Supply Chain Management* (3), ss. 290-305.

Pfeffer, J., & Salanik, G. (1978). The external control of organisations .

Poirier, C. P. (2003). *The Supply Chain Manager's Problem-Solver: Maximizing the Value of Collaboration and Technology.* Boca Raton, Florida: St. Lucie Press.

Porter, M. E. (2008). *Competitive advantage: Creating and sustaining superior performance.* Simon and Schuster.

Prahinski, C., & Benton, W. (2004). Supplier evaluations: Communication strategies to improve supplier performance. *Journal of Operations Management* (1), ss. 39-62.

Qvale, P. (2015, mai 6). *www.tu.no*. Hentet fra http://www.tu.no/petroleum/2015/05/06/na-er-oljeprisen-pa-sitt-hoyeste-i-hele-2015

Robert M. Morgan, S. D. (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*.

Sako, M. (1997, March). Does trust improve business performance? . *In Lane, C. and Backman, R. (eds) Trust within and between organizations: Conceptual issues and empirical application*, ss. 88-117.

Seglem, E. (2015, april 29). *www.aftenposten.no*. Hentet fra http://www.aftenbladet.no/energi/Oljekrise-tema-pa-oljemesse-3685528.html

Skjøtt-Larsen, T., Schary, P., Mikkola, J., & Kotzab, H. (2008). *Manageing the global supply chain* (3rd ed. . utg.). Copenhagen Business School Press.

SpringTide, C. (2010). Seller's Perception Matrix. *The Essential Sourcing Skills Handbook series*, 1-11. SpringTide Consulting.

Teece, D., & Pisano, G. (1997). Dynamic capabilities and strategic management. *Strategic management journal* (7), ss. 509-533.

Vijay R. Kannan, K. C. (2006). Buyer-supplier relationships: The impact of supplier selection and buyer-supplier engagement on relationship and firm performance. *International Jourcal of Physical Distribution and Logistics Management*, ss. 1-25.

Williamson, O. (1979, October). Transaction-Cost Economics: The Governance of Contractual Relations. *Journal of Law and Economics* (2), ss. 233-261.

Yin, R. (2014). *Case study research: Design and methods* (5 th. edition. utg.). SAGE Publications Inc.

Zineldin, M., & Johnson, P. (2000). An examination of the main factors affecting trust/commitment in supplier-dealer relationships: An empirical study of the Swedish wood industry. *The TQM* (4), ss. 245-266.

# Appendix 1: Interview guide in English – The supplier perspective

The interview guide is prepared as guidance for the interview, and the purpose is to lead us through various concepts that are of importance for our investigation. The interview is semi-structured; meaning the following questions are not absolute, as follow-up questions might occur.

### In this initial section of our conversation we seek to obtain general information about the company, its history with GE Oil and Gas and the market the company operates in.

- 1. Could you briefly tell us about your company and the industry you operate in?
  - a. How would you say the competition is in your industry?
  - b. Are you aware of any competitors able to produce the same products to GE Oil and Gas?
- 2. Could you please elaborate on your relational history with GE Oil and Gas?a. When did you start working with GE Oil and Gas?
- 3. What products or service do you provide to GE Oil and Gas?
  - a. What type of product or service is this? E.g. Commodity, innovative, technical assemblies, patent?
  - b. How do you think you product/Service is of critical character for GE Oil and Gas?
  - c. Does your organization receive a forecast from GE Oil and Gas? And; do you know how much GE Oil and Gas will order in the nearest future?

In this section we seek to gain information regarding the relationship between the supplier and GE Oil and Gas, as well as reveal the level of collaboration and commitment present today. Some questions relates to the supplier's perception of initiatives that can improve the current situation.

4. In general, how would you define a good buyer-supplier relationship?
- 5. How would you evaluate your relationship with GE Oil and Gas?
  - a. Why do you think it is that way?
- 6. How would you define good collaboration in a relationship?
- 7. How is the collaboration between your company and GE Oil and Gas?
  - a. How could it be improved?
  - b. How do you believe this is possible?
- 8. How important is collaboration with GE Oil and Gas to you?
- 9. How do you perceive the trust to be in the relationship with GE Oil and Gas?a. Do you believe the trust is mutual?
- 10. What about commitment, how are you committed to GE Oil and Gas?
  - a. Do you perceive GE Oil and Gas to be committed to you?
- 11. How would an optimal relationship with GE Oil and Gas be according to you?
- 12. Do you believe GE Oil and Gas can do something to improve your relationship?
- 13. Are you willing to spend time and resources to improve the relationship with GE Oil and Gas?
- 14. How do you believe power is important in a relationship?
- 15. How important is GE Oil and Gas as a customer? In terms of:
  - a. Revenue
  - b. Volume
  - c. Future of your company
  - d. Reputation
- 16. How do your perceive communication is with GE Oil and Gas?
  - a. Do you find it important to have good communication with your customers for optimal performance?
- 17. How do you perceive the information you receive from GE Oil and Gas to be? (E.g. are the POs accurate?)
- Do you get any feedback on your performance from GE Oil and Gas?
  If yes:
  - a. How is it presented? (face to face meeting, email, telephone, document, statistically, etc)
  - b. Are you satisfied with the way the feedback is presented?
  - c. Is there any room for your feedback? (can you comment the feedback)
  - d. How often do you get the results from the evaluation

- e. Is this evaluation reliable? (is it correct?)
- 19. How would you consider the information exchange between your company and GE Oil and Gas to be?
  - a. Do you have problems obtaining important information from GE Oil and Gas?
- 20. How is the personal dialog with GE Oil and Gas?
- 21. How can any improvements be made in order to improve the communication?
- 22. Do your share sensitive information with GE Oil and Gas?
- 23. Do you have any other problems regarding information?
- 24. Anything else you would like to add to this topic of buyer-supplier relationships?

# In the final section of our conversation, we would like to reveal the suppliers overall perception of GE Oil and Gas as a customer, and what, if any, improvements can be made in order to enhance the relationship.

- 25. What criteria do you think is the most important for GE Oil and Gas regarding your performance?
  - Price
  - Lead time
  - On-time Delivery
  - Quality
  - Other
- 26. Why do you think so? Please elaborate
- 27. Are you happy with GE Oil and Gas as a customer?
- 28. If you could change one thing with GE Oil and Gas, what would it be? Why?
- 29. According to GE Oil and Gas, you have an OTD on X %, do you perceive this to be correct?
  - a. Why is it at this level?
  - b. How could this number be improved?
- 30. Finally, according to your company; how would an optimal relationship with GE Oil and Gas be?
  - a. And how can the current relationship reach that optimal relationship?

## Appendix 2: Interview guide in English – GE Oil and Gas perspective

The interview guide is prepared as guidance for the interview, and the purpose is to lead us through various concepts that are of importance for our investigation. The interview is semi-structured; meaning the following questions are not absolute, as follow-up questions might occur.

#### In this initial section of our conversation we seek to obtain general information about the company, its history with this supplier and the market the company operates in.

- 1. Could you please elaborate on your history with the supplier?
  - a. When did you start working with the supplier?
  - b. What type of product or service is supplied from the supplier? E.g. Commodity, innovative, technical advanced or patent?
- 2. In what way would you consider this supplier critical and the product they produce?
- 3. How often and how much do you purchase on a yearly basis from the supplier?
- 4. Why do you purchase from the supplier?
  - a. Do other suppliers supply these particular products?
  - b. If patent; are you planning to extend the relationship after the patent date expire, or are you planning to change supplier?

In this section we seek to gain information regarding the relationship between GE Oil and Gas and the supplier.

- 5. In general, how would you define a good buyer-supplier relationship?
- 6. How would you evaluate your relationship with the supplier?
  - a. Why do you think that is?

- 7. How would you define good collaboration and cooperation in a relationship?
- 8. How is the collaboration between your company and the supplier? (E.g. armslength vs. collaborative)
- 9. How could it be improved?
  - a. Do you believe it is possible to do these improvements?
- 10. From GE Oil and Gas perspective; how important is collaboration with the supplier?
  - a. Do you know if management from GE Oil and Gas and the suppliers meet to discuss strategy?
- 11. How do you perceive the trust to be in the relationship? (High vs low)
- 12. Would you say you trust the supplier? How?
  - a. How reliable is the supplier on:
    - On-time delivery
    - Quantity (right amount delivered)
    - Quality
    - Price
    - Accuracy of information
    - Do they do what they promise?
- 13. What about commitment, are you committed to the supplier?
  - a. And do you perceive the supplier to trust and be committed to GE Oil and Gas?
- 14. Do you believe the supplier can do something to improve your relationship?
  - a. How?
- 15. What is the long-term relationship perspective (future) with the supplier?
- 16. Are you willing to spend time and resourced to improve the relationship with the supplier?
  - a. Is site-visit performed? If not, could it be appropriate?
  - b. What about educational programs and coursing to improve the supplier's performance?
- 17. How do your believe power is important in a relationship?
- 18. How important is the supplier as a supplier in terms of:
  - a. Revenue
  - b. Reputation

- c. Final product delivered to customer
- 19. Anything you would like to add to this topic of buyer-supplier relationships?
- 20. How would you characterize power in your relationship with the supplier?
  - a. Is it balanced or unbalanced? If unbalanced, who has the most power?
  - b. Why do you think that is?
- 21. How important is the supplier in terms of:
  - a. Revenue
  - b. Volume
  - c. Reputation
  - d. Final product delivered to customer
- 22. What happens if the supplier does not deliver on-time? E.g. Penalty? Threats?
- 23. How do your communicate with the supplier? (E.g. telephone, email, etc)
  - a. How do you perceive the communication is with the supplier?
  - b. How and why is good communication with your suppliers important for optimal performance?
- 24. Do you get any feedback from the supplier? (e.g. are PO's accurate enough)
- 25. Does the supplier get any information on how they are performing? And rated?
- 26. How would you consider the information exchange between your company and the suppliers to be?
  - a. Do you have problems obtaining important information from the supplier?
  - b. Does it ever occur that you don't receive critical information? E.g. production delays
  - c. How is the personal dialog with the supplier?
  - d. Do you share sensitive information with the supplier?
  - e. Does sales management at the supplier get involved in critical situations?
- 27. Can any improvements be made in order to improve the communication?
- 28. Do you have any other problems regarding information exchange (the communication process)?
- 29. Anything you would like to add to this topic of buyer-supplier relationships?

In the final section of this interview, we would like to reveal GE Oil and Gas overall perception of the supplier.

- 30. What criteria is the most important for GE Oil and Gas based on the supplier products?
  - a. Price
  - b. Lead time
  - c. On time delivery
  - d. Quality
  - e. Other
- 31. Why is this case? Please elaborate
- 32. Overall; are you happy with the supplier as a supplier? Why?
- 33. If you could change one thing with the supplier, what would it be? Why?
- 34. Do you believe there is anything GE Oil and Gas could do to improve the current relationship with the supplier?
- 35. Finally, according to your company, how would an optimal relationship with the supplier be?

### Appendix 3: Intervju guide på Norsk – Leverandørens perspektiv

Intervju guiden er laget som en veiledning for intervjuet, og formålet er å lede oss gjennom forskjellige temaer som er viktig for vår oppgave. Intervjuet er semi-strukturert; som betyr at det kan oppstå oppførgingsspørsmål underveis i intervjuet, i tillegg til spørsmålene under.

## I denne innledende delen av samtalen, ønsker vi å innhente generell informasjon om selskapet, og dets historie med GE Oil and Gas.

- 1. Kan du kort fortelle oss om selskapet ditt og bransjen dere opererer i?
  - a. Hvordan vil du beskrive konkurransen i industrien?
  - b. Kan konkurrenter levere samme produkt til GE Oil and Gas som dere?
- 2. Kan du fortelle oss om ditt selskaps historie med GE Oil and Gas?
  - a. Når startet samarbeidet?
- 3. Hvilke produkter/hvilken service leverer dere til GE Oil and Gas?
  - a. Hvilken type produkt/service er dette? (Teknisk avanserte, vanlig, patent)
  - b. I hvilken grad tenker du at produktet dere tilbyr er av en kritisk karakter for GE Oil and Gas?
  - c. Mottar selskapet ditt prognoser (salgs) fra GE Oil and Gas? Vet du f.eks hvor mye GE Oil and Gas vil bastille i nærmeste fremtid?

#### I denne delen av samtalen ønsker vi å innhente informasjon om forholdet mellom leverandøren og GE Oil and Gas.

- 4. På generelt grunnlag, hvordan vil du definer et godt kunde-leverandør forhold?
- 5. Hvordan vil du evaluere deres forhold til GE Oil and Gas?
  - a. Hvorfor tror du det er slik?
- 6. Hvordan vil du definer et godt samarbeid i et forhold?

- 7. Hvordan er samarbeidet mellom dere og GE Oil and Gas?
  - a. Hvordan kan det eventuelt bli bedre?
  - b. Hvordan kan dette la seg gjøre?
- 8. Hvor viktig er samarbeidet med GE Oil and Gas for dere?
- 9. Ser dere på GE Oil and Gas som en attraktiv kunde?
- 10. Hvordan vil du karaktirisere tillitten i forholdet med GE Oil and Gas?
  - a. Tror du tilliten er gjensidig?
- 11. Hva med forpliktelser; er dere forpliktet til GE Oil and Gas?
  - a. Føler du at GE Oil and Gas er forpliktet til dere?
- 12. I følge deg, hvordan ville et optimalt forhold til GE Oil and Gas være?
- 13. Ser du noe GE Oil and Gas kan gjøre for å forbedre forholdet?
- 14. Er ditt selskap villig til å bruke tid og ressurser for å forbedre forholdet til GE Oil and Gas?
- 15. I følge deg; hvordan er makt viktig i et buyer-supplier relationship?
- 16. Hvor viktig er GE Oil and Gas som kunde for dere i forhold til:
  - a. Omsetning/profit
  - b. Volum
  - c. Leverandørens fremtid
  - d. Rykte
- 17. Hvordan foregår kommunikasjon? F.eks telefon, mail?
  - a. Hvordan oppfatter du denne kommunikasjonen mellom GE Oil and Gas og dere er?
  - b. Hvordan og hvorfor tror du god kommunikasjon er viktig for å oppnå best mulig leverandør prestasjoner?
- 18. Hvordan vil du karakterisere informasjonen du mottar fra GE Oil and Gas til å være? Er POéne nøyaktige?
- 19. Får dere noe tilbakemelding fra GE Oil and Gas om deres prestasjoner? Hvis ja:
  - a. Hvordan får dere den presentert? (Personlig, e-post, telefon, documenter, statistik?)
  - b. Er dere tilfreds med måten tilbakemeldingene blir presentert på?
  - c. Hard ere mulighet til å kommentere tilbakemeldingene?
  - d. Hvor ofte får dere tilbakemelding på deres prestasjoner?
  - e. Er denne tilbakemeldingen korrekt?

- 20. Hvordan vil du beskrive informasjons-utvekslingen mellom dere og GE Oil and Gas?
  - a. Har dere problemer med å innhente viktig informasjon fra GE Oil and Gas?
  - b. Hvordan er den personlige dialogen med GE Oil and Gas?
- 21. Tror du kommunikasjons prosessen kunne vært forbedret?
- 22. Deler dere sensitive informasjon med GE Oil and Gas?a. Deler GE Oil and Gas sensitiv informasjon med dere?
- 23. Har du noe du vil tilføye til dette temaet som omhandler kunde-leverandør forholdet mellom dere og GE Oil and Gas?

Avslutningsvis ønsker vi å danne et overordnet bilde av leverandørens oppfatning av GE Oil and Gas som kunde, og eventuelle tiltak som kan bli gjort for å forbedre forholdet.

- 24. Hvilket av de nedenstående kriteriene tror du er viktigst for GE Oil and Gas som kunde?
  - Pris
  - Produksjons og leveringstid
  - On-time delivery
  - Kvalitet
  - Andre?
- 25. Hvorfor tror du dette er tilfellet? Vennligst utdyp
- 26. I følge GE Oil and Gas, har dere en OTD på X%, oppfatter du dette som korrekt?
  - a. Hvorfor er det slik?
  - b. Hvordan kan dette bli forbedret?
- 27. Alt i alt; Er dere som leverandør fornøyd med GE Oil and Gas som kunde?
- 28. Hvis du kunne forandret en ting med GE Oil and Gas, hva ville det ha vært? Forklar?
- 29. Avslutningsvis, ifølge dere, hvordan ville et optimalt forhold til GE Oil and Gas være?
  - a. Og hvordan kan det nåværende forholdet oppnå dette?

### Appendix 4: Intervju guide på Norsk – GE Oil and Gas sitt perspektiv

Intervju guiden er laget som en veiledning for intervjuet, og formålet er å lede oss gjennom forskjellige temaer som er viktig for vår oppgave. Intervjuet er semi-strukturert; som betyr at det kan oppstå oppførgingsspørsmål underveis i intervjuet, i tillegg til spørsmålene under.

#### I denne innledende delen ønsker vi å innhente generell informasjon om seksapet og dets historie med leverandøren og markedet selskapet opererer i.

- 1. Kan du fortelle oss litt om GE Oil and Gas sin historie med denne leverandøren?
  - a. Når startet samarbeidet?
  - b. Hva slags produkter eller service leveres av denne leverandøren? Patent, innovative produkt, teknologiske, vanlige og standard produkter?
- 2. På hvilken mate vil du anse leverandøren og deres produkt som kritisk?
- 3. Hvor ofte of hvor mye kjøper dere i året fra denne leverandøren?
- 4. Hvorfor kjøper dere varer fra akkurat denne leverandøren? Single sourcing?
  - a. Er det andre leverandører som kan tilby de samme varene som GE Oil and Gas etterspør?
  - b. Dersom patent, tror du GE Oil and Gas vil fortsette å kjøpe varer fra denne leverandøren i fremtiden når patentene er utgått?

I denne delen ønsker vi å opparbeide forståelse av forholdet mellom GE Oil and Gas og leverandøren.

- 5. Generelt sett, hvordan ville du forklart et godt buyer-supplier relationship?
- 6. Hvordan vil du evaluere deres forhold til leverandøren?
  - a. Hvorfor tror du det er slik?

- 7. Hvordan vil du forklare et godt samarbeid i et buyer-supplier relationship?
- 8. Hvordan oppfatter du samarbeidet mellom GE Oil and Gas og leverandøren?
- 9. Hvordan tror du det kunne blitt forbedret?
  - a. Tror du det er mulig å gjennonføre disse forbedringene?
- 10. Hvor viktig tror du samarbeidet med leverandøren er for GE Oil and Gas?
- 11. Hvordan oppfatter du tilliten er med leverandøren og GE Oil and Gas? (Høy eller lav)
- 12. Hvor pålitelig er leverandøren i forhold til:
  - a. On-time delivery
  - b. Kvalitet
  - c. Kvantitet (mottar riktig antall i forhold til bestilling)
  - d. Konkret og nøyaktig informasjon
  - e. Gjør som de lover
- 13. Ville du sagt at GE Oil and Gas stoler på leverandøren?
- 14. Hva med forpliktelse; er GE Oil and Gas forpliktet til leverandøren?
  - a. Tror du leverandøren er forpliktet og stoler på GE Oil and Gas?
- 15. Ifølge deg, hva er et optimalt samarbeid med en leverandør?
- 16. Tror du leverandøren kan gjøre noe som ville forbedret dagens forhold?
  - a. Hvordan?
- 17. Hva er langtidsutsiktene for forholdet med leverandøren?
- 18. Er GE Oil and Gas villig til å bruke tid og ressurser for å forbedre dagens forhold med leverandøren?
  - a. Utføres det leverandør besøk i dag? Dersom ikke, kunne dette vært aktuelt?
  - b. Hva med trening og utdannings program for å forbedre leverandørens prestasjoner?
- 19. Ønsker du å legge til noe innenfor temaet buyer-supplier relationship?
- 20. Hvordan ville du forklart makt i et buyer-supplier relationship?
- 21. Hvor viktig er leverandøren?

I forhold til:

- a. Inntekt
- b. Volum
- c. Rykte
- d. Det ferdige produkt som blir levert til GE Oil and Gas sine kunder
- 22. Hvordan ville du beskrevet maktforholdet i deres forhold til leverandøren?

- 23. Hva skjer dersom leverandøren ikke leverer tidsnok? F.eks straff? Trusler?
- 24. Hvordan oppfatter du kommunikasjonen mellom GE Oil and Gas og leverandøren?
  - a. Hvordan og hvorfor tror du god kommunikasjon med leverandøren er viktig for å oppnå best mulig leverandør prestasjoner?
- 25. Får dere tilbakemeldinger fra leverandøren? F.eks er POene nøyaktige nok?
- 26. Får leverandøren noe informasjon om hvordan dere oppfatter deres prestasjoner? Hva med hvordan de er ratet?
- 27. Hvordan ville du sagt at informasjons utvekslingen er mellom GE Oil and Gas og leverandøren?
  - a. Er det vanskelig å få viktig informasjon fra leverandøren?
  - b. Hender det ofte at dere ikke får viktig informasjon fra leverandøren?
  - c. Hvordan er den personlige dialogen med leverandøren?
  - d. Hender det ofte at lederen for salgsavdelingen blir involvert i viktige saker?
  - e. Deler GE Oil and Gas sensitiv informasjon med leverandøren?
- 28. Er det noe som kunne forbedret dagens kommunikasjon med leverandøren?
- 29. Oppfatter du at det ellers er noen problemer angående informasjonen fra/til leverandøren?

#### Avslutningsvis ønsker vi å danne et overordnet bilde av GE Oil and Gas sin oppfatning av leverandøren.

- 30. Hva er viktigst for GE Oil and Gas i forhold til leverandørens produkter? I forhold til:
  - a) Pris
  - b) Produksjons og leveringstid
  - c) On-time delivery
  - d) Kvalitet
  - e) Andre
- 31. Hvorfor det? Vennligst utdyp.
- 32. Alt i alt; Er du fornøyd med leverandøren? Hvorfor?
- 33. Hvis det var en ting du kunne endret med leverandøren, hva ville det vært? Hvorfor?

- 34. Tror du at det er noe GE Oil and Gas kan gjøre for å forbedre dagens forhold med leverandøren?
- 35. Ifølge GE Oil and Gas, hvordan ville et optimalt forhold med leverandøren vært?