Management of Offshore Outsourcing: A case study based on Transaction Cost Analysis (TCA)

Rakhshanda Tabassum

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Molde, 3rd June, 2014
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Dedicated to My Great, Loving and Cooperative Parents, Family and Friends.
Their facilitation and encouragement enables me to accomplish my aspirations.
Acknowledgment

I express my deepest gratitude to my supervisor, Sergei Teryokhin for his intellectual guidance, caring, patience and providing me with the excellent atmosphere for doing this research.

My special thanks to the respondents from all three companies, who have provided me the necessary information for this research and gave me time from their busy schedule.

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Abstract

**Purpose:** The aim of this study is to investigate that how companies are managing the risks and costs in offshore outsourcing and how far they have been successful in managing them. For this purpose, previous researches have been made the foundation to develop the propositions.

**Theoretical framework:** Transaction cost analysis (TCA) has made the theoretical ground to develop the propositions and research model. As there are three tenets of TCA and two behavioral assumptions. Two of the dimensions of transactions, i.e., Asset specificity and environmental uncertainty were used as dependent variables and opportunism and transaction costs are set as dependent variables. Four propositions were formulated to check the impact of independent variables on the dependent and for the evaluation, three case companies were selected to collect the information that were involved in the offshore outsourcing.

**Finding:** The results reveal that risk/opportunism do emerge from asset specificity and environmental uncertainty increases the transaction cost. But no direct association was found in the asset specificity and ex-post transaction costs. These risks and costs are attenuated under the environment with a high degree of relational norms and trust, but the importance of legal contract cannot be ignored as it is considered the main enforcement mechanism.
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Chapter 1

1.0 Introduction:

The globalization has made the outsourcing as the most trendy business strategy. Today it is becoming more strategic in nature as top management is involved in the decision by spending a large amount of resources (Willcocks, 2010). Developed economies are benefiting from this strategy, both locally and offshore in a dramatic way. The rationale of being efficient and reduce cost has pushed the firms to focus on fewer area by specializing in them. It also aimed to get an overall performance improvement of the business. Major leading firms exploiting the capabilities of suppliers in different business process and now firms outsource core business process such as designing, production, marketing and engineering (Aron and Singh, 2005).

Similarly, many suppliers with deep knowledge and experience of their fields have invested in their capabilities and process to gain efficiencies and economies of scale. That signaled the companies to leverage the capabilities of specialized suppliers to outsource the non core activities and to concentrate on their core competencies to gain competitive advantage. But it has been noticed that many firms due to lack of proper outsourcing strategies fail to reap the benefits of outsourcing hence unable to compete in the global economy (Gottfredson et al, 2005).

Companies gain access to the capabilities and specialized skills of supplier by using the modes of strategic alliances and cooperative ventures, etc. Outsourcing of core and non core activities is one form of strategic alliances like the other forms such as joint ventures, franchises etc (Nooteboom et al, 1997).

There are researches which prove that companies failed to manage successful offshore outsourcing. For example, Moe et al, (2012) in a report presented at IEEE international conference on global software engineering (ICGSE) concludes that small and medium sized Scandinavian software companies failed to operate successful offshore outsourcing. These companies have changed their strategies from offshore outsourcing to offshore insourcing and the underlying causes of such failures are poor domain knowledge, low quality, lack of motivation and employee turnover. Similarly Aron & Singh (2005) also conducted a study on offshore outsourcing and found out that the trend of using the insourcing is becoming popular because companies failed to achieve the expectation from offshore outsourcing. Moreover a firm is itself responsible for such results as the managers do not think outsourcing a strategic decision. Companies need to choose the right process
which should be outsourced and then they should calculate the risks associated to it and finally match the form of organization with the needs. The risks identified are structural risks i.e. within the relationship and operational risks i.e. related to operations.

This research will view the issues involved in the relationship of a client firm and its contractor/vendor in the light of transaction cost analysis (TCA). Transaction cost analysis is an approach that clearly judges that how firms make the choice to make a transaction inside the firm (vertically integrated) or outside in the market (outsource) (Ellram and Billington, 2001). The decision of outsourcing and internal management is based on the costs associated with it, the transaction costs associated with market governance are costs that are needed to run the system. In recent researches there are three forms of structure of the governance namely market, hybrids and hierarchies (Williamson, 1991). The transaction cost is dependent on three factors; 1) the frequency of the exchange, 2) asset specificity and 3) the uncertainty (Williamson, 1981).

TCA has two behavioral assumptions, namely bounded rationality and opportunism (Wang, 2002). Bounded rationality means transacting parties are intended rational but limited so (Simon, 1961) and opportunism is defined as self-interest seeking with guile (Williamson, 1975: 9). Bounded rationality created the problem of writing incomplete contracts and it is combined with the opportunism and uncertainty ex-post performance problems are evolved (Williamson, 1985). As TCA has three dimensions that are equally important, but asset specificity and uncertainty becomes more relevant than frequency in this research. As Wang et al, (2002) excluded the frequency construct from his model of customized software outsourcing considering it a onetime event. So in this research as well as case companies work on the principle of engineer to order (ETO) and tailor made solutions and each project can be considered distinct, customized and onetime event so frequency construct will be eliminated.

1.1 Purpose of the study:

According to Walliman, (2005) today most of the studies are termed as research, but in fact they are not research in true meaning. For example, without any purpose collection of facts and information, assembling/reordering of data and information, but without inference and any purpose collecting information.

The purpose of this study is to highlight how firms are managing outsourcing in a country that is far away from their parent country. This study is also interesting because the selected case companies are based on engineer to order (ETO) strategy. As depicted by
Bertrand and Muntslag, (1993) that engineer to order production is characterized on the basis of customer’s order position, customer specific products and product and production uncertainty. So ETO requires a totally different production system.

The research questions decide the nature of answer for example either descriptive, descriptive and explanatory, or explanatory answers. In the research methods’ literature, the classification of the purpose of the research is of threefold i.e. descriptive, explanatory and explanatory. Since the research questions can be both descriptive and explanatory type the research has dual purposes (Saunder et al 2009). The question which will guide this research is how companies manage the risks and costs associated with offshore outsourcing? First, the study will explore the rationale behind the strategy of outsourcing offshore in order to get the idea that how far companies are successful in managing this business. As the relationship management plays very significant role in the outsourcing process, so the risks and costs associated with contractor/ vendor’s behavior will be examined from the lens of transaction cost analysis. Moreover, how the risks and costs associated with this governance of outsourcing, which is purely a market mode can be influenced by trust. Few other variables will be taken into consideration to check their effect on risk mitigation.

1.2 Method of study:

The methods of research that will be used is a case study as Yin, (2012) characterizes the case study methods that it takes the in-depth focus with covering a large range of contexts and multifaceted conditions on a case without focusing on isolated variables. The instrument for data collection will be a semi structured questionnaire followed by an interview and emails if needed.

1.3 Structure of the study:

The report is divided into eight chapters. The thesis starts from second chapter where the offshore outsourcing is discussed by making the foundation of different other relevant concepts. In the third chapter the theoretical framework is discussed, i.e., transaction cost analysis (TCA) to develop the propositions and research model. Fourth chapter deals with the research methodology while concentrating on the case study method. Then fifth chapter elucidates the case study research design. The sixth chapter introduces the case companies and seventh chapter is based on analysis and the findings. Finally, chapter eight presents the discussion and conclusion.
Chapter 2

2.0 Outsourcing:
Outsourcing has turned into a crucial strategic decision which gives access to the capabilities outside the firm’s boundary by exploiting and developing these capabilities organizations can compete in the global business world of today (Mclvor, 2008). The sourcing decision is commonly known as ‘make or buy’ decision (Welch & Nayak, 1992). There are many definitions in the literature moving around the same points. Two very basic definitions are quoted here. Outsourcing is defined as “turning over all or part of an organizational activity to an outside vendor (Barthelemy, 2003a, 87). In another definition by Brown and Wilson (2005, 20) outsourcing is referred as “the act of obtaining services from an external source”. Bhagwati et al, (2004) describes the difference in the 1980’s outsourcing and current practices in this aspect. In 1980 outsourcing was solely based on the purchase of manufactured physical units rather than making them inside such components include as window cranks, seat fabrics etc. purchased by car companies. But later in 2004 outsourcing got a revolutionary meaning and it is related to a particular segment that has its role in the growing international trade. The purchase is said at arm’s length via using the electronic media, e.g. fax, telephone and internet.

In the literature outsourcing has been linked with the globalization, like Bhagwati et al, (2004) refer it as a result of globalization, outsourcing is described as an arm’s length trade. Prasad & Prasad, (2007) also related the outsourcing of productive activities to overseas countries as the fundamental ingredient of economic globalization in other words it means the offshore and near shore outsourcing. Offshoring Research Network (ORN, 2009) survey report reveals that manufacturing companies are the major players in innovation engineering, especially in the area of product and development, engineering services, and product design.

2.1 The role of information technology:
Outsourcing has become a very popular phenomenon in many industries and firms. Although for a long period, the assemblers were outsourcing from neighboring locations, but with the help of information technology and trade liberalization (UNCTAD, 2004), across the border outsourcing is also very common in recent years (Tomiura, 2009). Information and communication technology enabled the firms to outsource remotely many
business processes such as engineering, data management, IT development, customer service and billing etc (Karmarkar, 2004).

2.2 Levels of outsourcing:

Brown and Wilson, (2005) have identified three levels of outsourcing: tactical, strategic, and transformational.

2.2.1 Tactical outsourcing:

It is related to the problems being experienced by the firms which stimulate the actions to look for the solutions for example, inadequate managerial competence, the lack of financial resources for capital investment, etc. The focal point of the tactical outsourcing is the contract, drafting a precise contract and then keeping the vendor to fulfill the contract (Brown & Wilson, 2005). Sparrow, (2003) argues about tactical outsourcing that it means out tasking or contracting out which an immediate solution for a specific problem or need. Regarding the outsourcing relationship management, Brown and Wilson, (2005) argue that it is not only the responsibility of purchasing department rather all the managers in the supply chain should be involved in other words the whole organizational team participates in this process. According to McBlaine & Moritz, (2002) the tactical objectives, are cost reduction for the conventional activities and efficiency enhancement. Kedia & Lahiri, (2007) argue that TCE can be better theoretical perspective in explaining the tactical outsourcing, as firms find it more favorable (lower transaction cost) to conduct a transaction outside in the market rather than doing it internally with higher cost.

2.2.2 Strategic outsourcing:

Holcomb and Hitt, (2007, 466) define strategic outsourcing as “as the organizing arrangement that emerges when firms rely on intermediate markets to provide specialized capabilities that supplement existing capabilities deployed along a firm's value chain” According to Sparrow, (2003), this model depicts the partnership relationship where the client and the vendor work towards the common interests. The client will get the expertise from the vendor where as the vendor needs to be innovative rather to only follow the contractual specifications and it gets benefit from the stronger financial position of the customer. Both parties put their best to maintain the relationship that’s why risks and benefits are shared and bad performances are penalized. McBlaine & Moritz, (2002) assert that the strategic outsourcing aims broader perspective which involves management of business effectively for the firm’s extensive function and financial objectives. According
to Kedia & Lahiri, (2007), resource based theory (RBT) can be a theoretical background of strategic outsourcing. As RBT defines four attributes of a resource which a company possesses to build sustainable competitive advantage. It includes exclusivity, value, non-sustainability and imperfect inimitability. Consequently, if the company wants the competitive advantage of a strategic outsourcing contract, these four attributes can be developed for all the fundamental value chain resources by improving the focus on the core. It will eventually lead to the future competitiveness. Brown and Wilson, (2005) argue that strategic outsourcing is based on long term relationship development so the supplier base is reduced to few vendors which leads to partnership kind of relationship with mutual benefit as the motivating tool.

2.2.3 Transformational outsourcing:

It is defined as “partnering with another company to achieve a rapid, substantial and sustainable improvement in enterprise-level performance” (Linder 2004, 52). Brown and Wilson (2005, 24) refer it as third-generation of outsourcing and it has three stages. In outsourcing’s first stage activities are performed under the current laws, then in the second stage, corporation is redefined within outsourcing scope. While in the third stage outsourcing is adopted in order to redefine the business which becomes crucial for the corporation’s survival in a challenging business world.

All the transformational outsourcing is not similar; they can be categorized into four types. The first type is a rapid start-up which aims a speedy development of a new business. The second category is a pathway to growth; outsource the activity or process that is a hurdle in the growth. Change catalyst which is the third category and a state that focuses on the value adding activities and indicates an extensive change. The fourth category is called radical renewal the motive of outsource is to improve the core business radically (Linder, 2004). The resource based theory (RBT) also explains this form of outsourcing, which states that in an uncertain environment in order to compete effectively, firms are dependent on other organizations for the provisions of critical resources. So firms should adjust their boundaries to overcome the dependence on other firms in order to compete successfully (Kedia & Lahiri, 2007). Figure 1 depicts the three levels of outsourcing.
2.3 Outsourcing related concepts based on proximity:

There stays a confusion among different concepts related to outsourcing, these sourcing strategies are categorized based on modes and location. They include domestic in-house, domestic outsourcing, captive offshoring and offshore outsourcing. Depicted in figure 2. Peng & Meyer, (2011).

![Figure 2: Location of activity](image)

**Location of activity**

<table>
<thead>
<tr>
<th>Mode of Activity</th>
<th>At Home</th>
<th>Abroad</th>
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<tr>
<td>Internal</td>
<td>Domestic in-housing</td>
<td>Captive Offshoring</td>
</tr>
<tr>
<td>External</td>
<td>Domestic outsourcing</td>
<td>Offshore outsourcing</td>
</tr>
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Fig.2. Adopted from Peng & Meyer, (2011, 115).

2.3.1 Domestic in-house:

When a firm acquires services within its own system in the same nation is referred as domestic in-house sourcing for example, if a parent firm procures from its subsidiary or vice versa and within subsidiaries procurement (Murray & Kotabe, 1999).
2.3.2 Domestic outsourcing:
Peng & Meyer, (2011, 115) define it as “outsourcing to a firm in the same country”. While deciding which sourcing strategy to use when Tomiura, (2009) asserts that technological complex products are outsourced domestically.

2.3.3 Captive outsourcing:
According to Peng & Meyer, (2011, 115) “setting up subsidiaries abroad-the work done is in-house, but the location is foreign” referred as captive outsourcing. Dante Di Gregorio et al, (2009) identifies it as internally managed foreign direct investment (FDI). In a study conducted by Ari-Pekka & Tunkelo, (2009) on captive outsourcing in emerging economies the authors argue that companies develop their own permanent, proprietary existence based on knowledge and keeping the full product management in the emerging economies in the pursuance of being more responsive to serve the customer, having full control over the maintenance of old infrastructure and building new ones cost effectively. More importantly, companies dealing with complex products will not only find an expanded global business platform for themselves, but they can also contribute to the viable global economic development.

2.3.4 Offshore outsourcing:
Offshore outsourcing or simply offshoring means “moving an activity abroad” by Peng & Meyer, (2011, 115). Dante Di Gregorio et al, (2009, 971) defines “as an organization’s business process outsourcing to foreign contractors, and distinguish between international outsourcing of services and manufacturing”. Brown and Wilson, (2005, vii) define offshore outsourcing as “the procurement of goods or services by a business or organization from an outside foreign supplier, typically to gain the benefits of labor arbitrage”.

Some other terms include in sourcing and near sourcing. According to Gonzalez et al, (2006) in sourcing means if a company has outsourced a service, whether onshore, near shore or offshore, but takes it back to its supply chain and decides to manage it internally. Rao, (2004) describes near shoring as the outsourcing to a country which is near the home country, though it is an unfamiliar to the client firm. According to a report of Offshoring Research Network, (ORN,2009) manufacturing industry are conservative for offshore outsourcing for their service delivery model, rather they prefer to use captive delivery model.
2.3.4.1 The motivation for offshoring:

Major research is conducted in offshore outsourcing of information system and software development (Gonzalez et al, 2006; Moe et al, 2012; Herath & Kishore, 2009; Erber & Sayed-Ahmed, 2005; Oza & Hall, 2005; Benjamin & Julie, 2007; Khan & Fitzgerald, 2004; Carmel & Nicholson, 2005). There is also comparatively less literature available which covers the offshoring of professional services (Ellram et al, 2008; Amman et al, 2012). All of these studies explored the basic motive of offshore outsourcing that is cost reduction or getting the benefit of low labor cost (Khan & Fitzgerald, 2004; Benjamin & Julie, 2007; Ellram et al, 2007; Di Gregorio et al, 2009). For example Peslak, (2012) in a research within major IT offshore outsourcing firms finds out that as information technology (IT) does not relate to the core business of the corporations that’s why the potential for cost reduction is significant. Some IT and software development companies sought the benefits such has capacity enhancement, quality improvement (Ellram et al, 2007). Other rationales for offshore outsourcing include expansion of relationship with partners in offshore countries and to cater the customers more efficiently. In case of SMEs due to size and resource constraints which hinder the hiring of talented professionals on shore, but getting going offshore give them access to a low cost talented workforce which can help the SMEs to build competitive advantage (Di Gregorio et al, 2009).

2.3.4.2 Risks involved in offshore outsourcing:

Around the world, offshoring and outsourcing has detained the minds of organizations’ CEOs. Especially the companies from Europe and North America have adopted this strategy in the pursuance of cost cut, efficiency and strategic competitiveness. But conversely many firms had experienced terrible results. Studies revealed that half of the firms which aimed for financial benefits such as cost reduction failed to attain such benefits. According to reports of Boston Consulting Group (BCG) and Gartner, companies from North America, which signed contracts between 2001 to 2004, have failed to meet the expectations. This has led to the popularity of insourcing and inshoring. Companies find it very easy to offshore the components or products and in most of the time they do it without analytically, hence they make the one out of three primary errors. The first mistake is the decision of which process to outsource, they can be either core, critical or commodity. The second mistake is mostly organization do not take into consideration all the risks associated with the offshore outsourcing, they just calculate the cost benefit analysis and start processing. The third mistake is related to a form of governance, that is
companies not taken into account all the available options for governing the transaction e.g. insourcing and end up on offshore outsourcing (Aron & Singh, 2005). Outsourcing crashes require the attention of managers and researchers to understand the underlying issues which results in such massive failures. Some of the issues/risks involved in the offshoring of information system (IS) are categorized on the basis of four factors linked to the process of offshore outsourcing. The risks that can arise in the first stage of outsourcing i.e., while making decisions for which functions to outsource and what should be the size of them. The risks related to this stage include loss of internal know-how, loss of core capability, loss of competitive edge, loss of intellectual property (IP). While selecting the vendor, operational risks due to the location of vendor, risks due to difference in environment, culture, legal system, the difference between what is negotiated and what is actually delivered, augmented costs. Another set of risks appears in the management of the relationship with the vendor and it includes intended underperformance, violate the terms of the contract by miss using or stealing the proprietary information, lock-in situation etc. Further risks related to technology are poor infrastructure for communication, complication in developing codes, unclear requirements, contrary development tools and standards etc (Herath & Kishore, 2009).

Aron & Singh, (2005), claim that offshoring cannot be profitable if companies do not take the right process to offshore. Most importantly operational and structural risks (Kumar et al, 2009) need to be calculated and need to match the organizational form with needs. Risk identification plays a vital role in the process of outsourcing. There are two different kinds of risks which companies face i.e. operational and structural risks. Former form is related to initial stages of offshoring processes, whereas the latter form becomes more important with the passage of time. Operational risks are based on the processes if they don’t work desirably after offshore outsourcing, whereas the structural risks are related to relationships with the service provider that if it does not work as being expected.

Kumar et al, (2009) argues that operational risks mean that likely underperformance in respect to quality, cost and the speed of execution of process. These factors have influence on operational performance, hence competitiveness of the firm. They comprise of three risk factors, i.e. people, technology and process. The factor of people means the turnover and lack of capability, then the technology factor mean the defects in the technology between client and service provider and finally the risk due to the process which is regarding the measures to evaluate the effectiveness and efficiency of a process. These risks are external to the firms apart from this type of risks; there is one category of risks
which is internal to the firms and based on the interorganizational relationship of the offshoring firms and the service provider firm. The structural risks are linked to the operational risks and become the part of evaluations of the operational risks.

2.3.4.2.1 Structural risks:

A company’s assumption about the vendor firms that they will work in the interests of both groups is not a prudent one. One such risk is the opportunistic behavior by the vendor who, while making contract mentions to use the required qualified agents, but later on stops investing in hiring qualified staff. Which hinders the pace of work for client and client mostly of the times gets dependent and it has to invest in training and upgrading to boost the productivity. Another risk is because of non-monitoring by the client in which vendors put less effort once they get a contract and as a result the client has to bear the cost of errors and defects. Another kind of risk is evolved when the vendors alter the terms of the contract because as the relationship develops the power shifts from buyer to seller. The reason is that the buyer firm transfers the processes to the vendors and fires the workforce, which used to perform those processes/tasks. When the time of contract renewal comes the vendor can demand higher prices and now the buying firm can’t get the employees back on short notice. One vendor demanded the 65% higher process while contract renewal and the buying firm had to pay because it has abandoned its processing capacity. Two factors that enhance such risks are number one, that the buying firm transfers the tacit knowledge by investing time and effort in training of vendor firm’s employees. Secondly, some processes take time to get stabled; both situations increase the switching cost to the buying firm.

There are many studies identifying the risks due to the external environment such as differences in culture (Winkler et al, 2008; Beasley et al 2004), legal system (Pai & Basu, 2007; Erber & Syed-Ahmed, 2005). Other risks include exchange rate volatility (Erber & Syed-Ahmed, 2005), language barriers and political risks (Ellram et al, 2008). The focus of this study will be the internal risks within the dyadic relationship of client and vendor, as Aron & Singh, (2005) termed them as structural risks. Natovich, (2003) calls these challenges as vendor risks and client bears them while contracting them with outside vendors. He further argues that previous studies concentrated on the internal issues of projects, very little attention has been paid to the method of sourcing and the involvement of the vendor for undesirable outcomes. The study reveals that clients outsource IT projects to transfer the risks i.e. delivery delays, budget issues, technological infeasibility
to the vendor, but in fact, new kind of risks i.e. risks concerning the vendor’s motivation and capability to complete the contract, emerge as the relationship develops. The risks pointed out are adversarial relationships and loss of trust, vendor management de-escalation of obligation and difficulty in breaching the agreement. In adversarial relationship, undecided scope and undefined requirements are considered the main cause of the project failures. This risk leads to a series or disputes hence the situation of distrust and finally the project seems impossible to complete. The second kind of risks involves the vendor’s lack of commitment due to reasons such as fixed price contracting which does not cover the cost afterwards and then the strategic shift from one business to another in other words the decline in the strategic importance of one business/ project. The last risk is about breaching the contract, sometimes companies get trapped because of legal consideration companies knowingly put the money, time and resources in a hopeless project. The trust is also very basic cause of such risks as lack of trust created the conflicts between the transacting parties.

Incomplete specifications and inability to measure the performance of the vendor are also risks involved in offshoring of professional services. Incomplete specifications refer to the situation when the client firm does not completely familiar with its requirements for the offshore outsourcing purpose. Whereas inability to measure the performance means that the client has used some improper performance measurement tools and contracts with incomplete specifications (Ellram, 2008).

In offshoring software development, there are three categories of ex post risks explored by Mathew, (2011). These risks include shirking, loss of control over information assets and service provider lock-in risks. Shirking is a behavioral problem arises when the service provider gets the benefit if the client doesn’t monitor effectively the activities of their service provider. In other words the limited observeability becomes the stimulus for the information asymmetry hence the reason for shirking attitude. The root causes of shirking behavior found are effort incentive gap and incomplete contracts. As the service provider senses less than expected profit or probability of project loss it gets into self interest seeking actions such as withdrawing the key professional’s from the project. The second category of risk is loss of control over information assets, as the software development needs extensive kind of sharing of information. Apart from the vendor/service provider needs to know the client’s business process thoroughly. This tacit information transfer makes the client firm vulnerable to the risk of loss of information assets such as IP (intellectual property) infringement. Again limited observability as the client firm can’t
observe all the external communication of its vendor and inadequate contractual specifications are the determinants of shirking behavior. The third risk is the lock-in situation which means the power imbalance and dependence over the service provider. This situation occurs if the client transfers its experienced IT personnel into the vendor’s organization which increases the switching cost for the client firm. It will enhance the bargaining power of service provider in the future, thus the condition of the lock-in appears. Another reason could be, if the service provider owns some unique kind of assets which are not available in the market, and then the risk of service provider lock-in is inevitable (Mathew, 2011).

The widely noted primary risk of outsourcing is the opportunism of the service provider. It is believed that if the service providers are given the opportunity, they will act in their own best interest, forgetting how much bad consequence the clients would face (Handley & Benton, 2012). According to Williamson (1975, 9) Opportunism is defined as “self-interest seeking with guile”. It can be apparent in the form of stealing, disguise, cheating, alter, lying and intended efforts to mislead, complicate, or otherwise confuse. Carmel & Nicholson, (2005) claim opportunism as the condition when the one transacting party takes advantage of the other. The distance between the client and the vendor stress the likelihood of some hidden behind the sight opportunistic behaviors.

Shirking and poaching are two forms of opportunism which can destroy the decision of outsourcing. Shirking means the deliberate underperformance and withholding the resources which the client cannot detect. Whereas poaching means the extent to which the service provider use the information gained from the relationship with the vendor for its own benefit, the unauthorized benefit which the client cannot detect (Handley & Benton, 2012).
Chapter 3

3.0 Theoretical grounding:
Outsourcing has first discussed by Coase with transaction cost theory and incomplete contracts which is later studied by many researchers and the findings say that outsourcing, which is relinquish of one activity to an outside vendor is not a frictionless process. Using market governance comes with a cost and if the cost is too high, then internal production is the better option (Aubert et al, 2004).

The firm is depicted as a governance structure in transaction cost analysis (TCA also referred as transaction cost economics/TCE (Ellram & Billington, 2001)). This means that firms and markets are described as an alternative form of governance. The transaction cost is difficult to measure, but the best way overcome is that issue faced involved in alternate forms of governance is analyzed so the gap between the transaction costs decides to choose the form of governance. The major of these costs is the maladaptation cost of an unforeseen problem (Williamson, 1996).

Based on the cost and risks associated with form of governance, there are certain functions that needs to be outsourced and the other should carry out internally. Transaction cost analysis (TCA) serves the purpose of explaining the phenomenon of outsourcing. It has several tenants which relate to outsourcing (Ellram, 2008). According to transaction cost analysis (TCA) the difficulties found in the interorganizational relationship pivot on three principal tenets of TCA. They are transaction specific investment (TSI), uncertainty and transaction frequency (Williamson, 1979). This study concentrates on recurring relationship so the transaction specific investment (TSI), uncertainty becomes the two relevant characteristics. These two attributes are most often used variables in the TCA framework for outsourcing (David and Han, 2004).

TCA also has two behavioral assumptions, i.e. bounded rationality and opportunism. Bounded rationality is defined as when the exchange partners are “intendedly rationale, but limitedly so” (Williamson, 1985, 45). According to Williamson, (1975, 9) opportunism is defined as self-interest seeking with guile, then in later research, Williamson (1985, 47) explains guile as “lying, stealing, cheating, and calculated efforts to mislead, distort, disguise, obfuscate or otherwise confuse”. Carmel & Nicholson, (2005) claim opportunism as the condition when the one transacting party takes advantage of the other. The distance between the client and the vendor stress the likelihood of some hidden behind the sight
opportunistic behaviors. The study was based on small firms and it was concluded that they successfully identify the opportunism, but spent enough funds as controlling cost.

Wathne & Heide, (2000) discussed two forms of opportunism, one which is first mentioned by Williamson as guile is a strong or a blatant form, whereas the other form is a passive form of opportunism. The study reveals that the appearance of two forms of opportunism depends on the exchange circumstances. For instance, whether a specific behavior emerges in the existing circumstances or it takes place in changed circumstances because of exogenous events. The passive opportunism in the existing circumstances becomes shirking behavior and obligation’s evasion. Whereas in the new circumstances, passive opportunism can take the form of refusal to adopt and inflexibility. The other form is active opportunism that is reflected in the form of engaging in such behavior which is strictly prohibited under the existing circumstances but when the circumstances change, the opportunistic party forcefully renegotiates to extract concession from the new situation. The haggling and bargaining costs as used by Ghosh and John, (1999) are such behavior to get the benefit of a new situation.

Rindfleisch & Heide, (1997) discuss about Williamson’s work on TCA and conclude that his microanalytical framework is based on two key behavioral assumptions i.e. bounded rationality and opportunism and two focal transnational dimensions i.e. asset specificity and uncertainty. According to Williamson, (1985, 1988) transactions themselves are carried out in such an environment in which parties are limited by their bounded rationality.

The concept of transaction cost was brought forward by Ronald Coase in 1937, in his paper “The nature of the firm” where he viewed the market and firm as an alternative form of governance (Williamson, 2010). The transaction cost is a combination of four separate costs. It includes search costs, contracting costs, monitoring costs and enforcement costs (Williamson, 1985). Search cost includes the cost to collect the information for the potential vendors. Contracting cost means the cost involved in the writing and negotiating a contract/ agreement. Then monitoring costs refer to the costs connected to the monitoring of contract to ensure the fulfillment of the obligations of the transacting parties. Whereas the cost of enforcement refers to the ex post cost of negotiating and sanctioning the partner that doesn’t fulfill the requirement of an agreement (Dyer, 1997).

Mathew, (2011) has identified three kinds of behavioral risks i.e. shirking, loss of control over information assets and service provider lock in. Here shirking is the deployment of inferior quality resources to the project. For example, one Indian software vendor replaced
one experienced person with newly trained professional which hindered the pace of work. Another driver is an effort incentive gap which means that when the vendor receives less profit than expected and it’s a common practice to take out the key personnel from those projects which lead towards loss. One factor that enhances the chance of such behavior is lack of proper monitoring, because the service provider knows that due to thousand miles away the client will not be able to monitor properly. Although many vendors give access through a web based monitoring tools, but it does not work very effectively. Hence inadequate observability leads to information asymmetry which becomes the driver of shirking risk. Since contracts are also incomplete and the vendor can use its terms for its own favor. A second risk arises because of loss of control over information assets. Client’s loss of control over information assets e.g. IP infringement stems from its limited observability because the client cannot observe all the external communication of its service provider, unsatisfactory legal system, non compelling culture and political environment make the situation more vulnerable. When key personnel in the client organization are transferred in the service provider firm for keeping the efficient work pace, then the switching cost for those personnel increases in the client firm. Further, it increases the future bargaining power of the service provider hence lock in situation. Sometimes vendors provide very specialized kinds of services and they possess unique assets for those which becomes a hidden risk for the client to get into the lock in situation. Zsidisin & Ellram, (2003) discusses that as the sources of perceived supply risk became more widespread, purchasing organization stresses on eliminating those sources rather using buffers for risks. One such technique to manage risk is behavior based management which is more prevalent in manufacturing organizations than in the service industry. Behavior based techniques aim to align the goals of both parties, reducing the information asymmetry and program supplier activities. Peter & Andrew, (1992), assert that interorganizational relationships in both market and hierarchical modes can be governed by two types of contracts. One type is recurrent contracting which is based on the repeated exchange of moderate nature of transaction specific assets. Contracts are mostly short term and the terms are certain, but some room is left for future contingencies. Whereas the second form is relational contracting that involves long term relationship between two equal and autonomous bodies. Investment is made on the basis of the bargain for the production and property right transfers. Mostly the products, services and property developer in these relationships require high specific
investment which cannot be specified in advance before implementation. This makes the parties to face a big array of trading hazards while using relational contracting.

Ellram et al, (2008) proposes that TCA is a good theoretical framework for outsourcing of professional services apart from the cost perspective because it also assumes that firms will not outsource those areas where the likelihood of supplier opportunism is high. Supplier opportunism becomes certain when the client is unable to specify its requirements i.e. what it wants? And in other case if it is unable to assess the commitment of the supplier.

According to Williamson (1985) there are real differences between production cost and governance cost. Ex post transaction costs have different types, 1) the costs of maladaptation if the transactions run out of alignment. 2) The cost of haggling if the joint efforts are incurred to align the ex post issues. 3) The cost of setup and running the governance structure. 4) The relationship cost to make the commitments secure.

### 3.1 Transaction specific investment (TSI)/ Asset specificity:

According to Williamson, (1996) asset specificity means the extent to which an asset can be redeployed by substitute users to alternate uses without losing the productive value. It has relationships with sunk cost. Joshi & Stump, (1999, 336) define asset specificity as “the nonredoployment of investment of one party in their partner”. Ellram et al, (2008) refers the Transaction specific investment (TSI) as the assets which cannot be used for any customer and application other than one specific partner.

According to Williamson (1996), asset specificity can take six forms: (1). Site specificity: as in order to economize on transportation and inventory cost investment is made in close location to the partner, relationship is similar to Cheek-by-jowl relation. (2). Physical asset specificity: when specific dies are required to make a component. (3). Human specificity: which comes up from learning by doing. (4). Dedicated assets are referred to those distinct investments that are deployed at the plant of general purpose to serve a specific customer. (5). According to Klein and Leffler, (1981) Brand name capital investment means that there are few good will assets on which the firm earns profit or price premium. For example the products with brand name gets price premium compared to general products. This induces the firms to maintain the quality of products to get price premiums. (6) Temporal specificity is defined as the loss of value of a transaction which is conducted in an open market, but not on time compared to the same transaction that is performed within the boundaries of a firm (Masten et al, 1991). There are many researches which prove that temporal specificity gives rise to counterpart’s opportunism, where it shifts the time of
exchange away from the optimal time which leads to supply chain disruptions. So the best way to solve the issue if there is temporal specificity involved is to internalize the transaction by vertical integration (David et al, 2011).

Bensaou and Anderson (1999) are of the view that the presence of specific investment in a relationship decides what kind of governance arrangement and contractual safeguards will be used. The delivery of specific and complex nature professional business services require specific investment in the form of training of employees, development of employees, hardware, software and sometimes co-locating the employees of a buying firm. The investment in transaction specific assets leads to the problem of increased cost of switching the suppliers. Mathew, (2011) asserts that in offshore outsourcing of software development, clients make specific investments in software, specialized employees and networks etc. Such investments referred as asset specificity in TCE. This leads asymmetric dependence with the supplier being more powerful. While regarding the transaction specific investment (TSI) as one of the driving force for opportunism, Van der Vegt et al, (1998) claims that transaction specific investment (TSI) creates the switching cost for the client and the vendor behaves opportunistically at the time of contracting and contract renewal. Joshi & Stump, (1999) integrated transaction cost theory and relation exchange theory and regarded three determinants of opportunism and commitment which are asset specificity, environmental uncertainty and relational norms. The results conclude that relational norms improve commitments and reduce opportunism which is in consistence to the relational exchange theory (RET).

When some transactions require one or both parties in an exchange relationship to make transaction specific investments, then the potential of opportunism becomes more likely because these investments create quasi rents that is prone to hold up issues (Klein et al, 1978).

As the number of potential suppliers/ vendors is limited in the market, the possibility of vendor to get involved in opportunistic behavior becomes substantial (Aubert et al, 1998; Williamson, 1985). In another study by Mathew (2011), based on software development outsourcing in India reveals that if there is scarcity of vendors in the market with the required domain knowledge of software development that leads to lock-in situation which increases the switching cost. McIvor, (2008) is also of the same view that few capable suppliers intensify the chances of opportunism because of asset specificity. So based on the above literature following proposition can be drawn to check the relationship of asset specificity and opportunism.
Proposition 1a: There is a positive association between level of asset specificity and the opportunistic behavior of the vendor/contractor firm in the offshore outsourcing.

According to Williamson, (1985) the basic concern of transaction cost analysis is to safeguard the transaction against the risk of opportunism. Generally, these protections take the form of long term contracts, volume guarantees and bonds. Heide and John, (1988) assert that vertical integration is the major safeguarding arrangement in TCA. Vertical integration involves the safeguarding of specific assets against the opportunistic behavior through the actions such as 1. Developing the capabilities of monitoring and inspection 2. Improved reward structure and 3. By limiting the ability of the opportunistic party’s ability to profit from such kind of behavior. Stinchcombe, (1985) has identified two safeguarding tools, i.e. the long term contracts to safeguard the specific assets at risk and administrative control procedures such as close inspection of the site of the trading partner.

Due to the idiosyncratic nature of transaction specific investments (TSI), the problem of safeguarding becomes substantial. So there is an enormous need to design mechanisms that can reduce the consequent risk of opportunism (Klein, Crawford, & Alchian, 1978; Williamson, 1985). Safeguarding arrangements/promises as mentioned by Williamson, (1985) come with the cost to implement. As level of asset specificity increases the protection clauses in the contract become too complex and several, hence the implementation of safeguarding arrangements for such high specific investments increases the transaction costs (Aubert et al, 2004). The next proposition can be drawn as follow

Proposition 1b: Higher level of asset specificity increases the transaction costs for the outsourcing firm in the offshore setting.

3.2 Uncertainty:

According to Williamson, (1979) uncertainty means the inability to forecast the contingency that may occur in the future. Ellram & Billington, (2001) assert that the inability to predict the contingencies results in the formulation of incomplete contracts. This can lead to opportunism as the opportunistic party can get advantage by interpreting the contractual terms in its own favor. Lee, (1998) decomposes the uncertainty into three parts i.e. sufficiency of available information, certainty of outcomes and the assurance in the outcomes.
According to Cook, (1977) uncertainty emerges from scarcity of resources, lack of availability of exchange partners and imperfect knowledge about variation in the environment. Whereas Sutcliffe & Zaheer, (1998) assert that there are three sources of uncertainty i.e. primary uncertainty, competitive uncertainty and supplier uncertainty. Primary uncertainty arises from exogenous sources such as natural events, change of the customer’s preferences, regulatory changes, technological change, etc. Competitive uncertainty appears from the actions of actual or potential competitors whereas the third form of uncertainty that is supplier uncertainty roots from the actions of exchange partner firms. It is also known as behavioral uncertainty and arises because of ex ante and ex post opportunistic behavior of the exchange partner.

Ellram & Billington, (2001) have also identified two kinds of uncertainty internal/behavioral uncertainty and external/environmental uncertainty. Internal uncertainty emerges from inside the firms due to the behavior of transacting parties (Williamson, 1979) and it creates the problem of evaluation (Alchian and Demsetz, 1972). The drivers can be incomplete specifications and an inability to measure performance (Ellram et al, 2008), and lack of observeability (Narayanan and Raman, 2000). The second kind of uncertainty is environmental uncertainty will be used in the research model.

It does not necessarily mean that different kinds of uncertainty are equally independent, the interrelationship between different forms of uncertainty and their part in the governance choice, can be very complex (Shin, 2003). Another thing is that few researchers have used behavioral uncertainty as opportunism so this research will not include this construct in order to simplify the model.

3.2.1 Environmental Uncertainty:

Decision makers tend to be rational, but their limited information processing capabilities make them prone to bounded rationality. This constraint creates problems in an uncertain environment where conditions binding a transaction cannot be stated ex-ante and performance cannot be proved ex post, here conditions refer to environmental uncertainty and performance means behavioral uncertainty. Environmental uncertainty creates problems of adaptation, which means modification to contract in accordance with the varying conditions that leads transaction costs of renegotiation (Rindfleisch & Heide, 1997). Lendis et al, (2005) view that if the technological uncertainty is high, then it becomes difficult to develop a complete contract with all the terms, as a result the effectiveness of this managing device diminishes.
Van der Vegt et al, (1998) asserts that environmental uncertainty makes the complete contract writing an impossible job. As conditions change, recurrent modifications and conciliations become common. Complex nature of interdependencies of business processes also increases the transaction cost. While discussing the consequences of environmental uncertainty Anderson and Parker, (2002) claim that the high level technological change rate accelerates the process of knowledge obsolescence. As sources are reduced, which leads to uncompetitive supply market, hence the condition of buyer lock-in is created. That’s why technological uncertainty can stimulate the shirking and poaching (opportunism) behavior of providers. Anderson and Weitz, (1986) state that adaptation problem causes the opportunistic behavior if the transacting parties are unwilling to be flexible to changing conditions. Hence the discussion about the effect of environmental uncertainty over ex-post transaction costs supports to develop the following proposition.

**Proposition 2: There is a positive association between environmental uncertainty and ex-post transaction cost of offshore outsourcing.**

### 3.3 Mediating role of trust:

It has been considered that organization theorists emphasize the opportunism in their economic models, while ignoring the factors of trust and power (Perrow 1981; Jones 1983). Trust is a central construct in the social exchange theory (SET). According to SET, the evaluation of the relationship between the exchange parties is based on social exchange behavior such as trust and relationship commitment. The focus of exchange parties is long term-mutual gains so they look outside the short term horizon in which they face risks. Trust can emerge while making a transaction in the form of help, advice, companionship and social support etc (Blau, 1964). Trust is not a part of TCA, but it will be used here to check its effect on the transaction cost and opportunism variable.

Trust can be referred to the state of mind, the expectation of one trading partner that the other will behave in a mutually beneficial and predictable manner (Dodgson 1993).

When the contractual hazards are low, the contracts can be drafted completely with all the requirements specified in it, hence the contracts become the controlling device for such level of contractual hazards, but if there is a high level of contractual hazards, the future contingencies cannot be predicted, so the vendor can behave opportunistically, thus trust plays a very crucial role (Barthelemy, 2003b).

Natovich, (2003) discusses the importance of trust in the outsourcing IT projects. Trust is very crucial as well as difficult to build up in outsourced IT development projects which
require the cooperation of two stranger parties, especially in stressed and hard conditions. It's normal to have disagreements between vendor and client, but they become hazardous when commitment gets into a vicious cycle. Here trust has a very significant role, lack of it can lead to poor performance, further more conflicts. This situation reaches at one point where any new minor conflict can lead to termination of contract. There is a link between trust and performance. Performance can mean dependability and responsiveness. Trust will be built if the vendor shows in past behavior the dependability and responsiveness. Furthermore, contract based projects can weaken the trust, especially in the case of sample firm, for increased control company needed to compensate for decreased trust.

Ring & Van de ven, (1992) discuss that transacting parties start relying on trust when parties successfully complete their transactions by complying with the standards of equity. As the frequency of successful exchange increases between the parties the level of trust for following transactions also increases. An increased level of trust results in greater confidence in the actions of trusted party.

Chiles and McMackin (1996) claim that regardless of uncertainty, trust assists to lessen the transaction cost on different stage of a transaction. First at the time of contract writing, less specified contract is written given space for ex post settlement by the trustworthy party in a fair manner. Otherwise, if trust is not present in the relationship, then the contract is drafted, spelling out all the terms to avoid any gap which can be exploited by the supplier opportunistically. Then on the negotiating phase, a trustworthy reputed partner is expected to come to a quick resolution.

Studies reveal that in case of environmental uncertainty, and unintended problems trust in inteorganizational relationships plays a very significant role, for instance, according to Lorenz, (1988) those partnerships which are built on trust exhibits larger characteristics of adaptability. Further, the existence of trust in the relationship proves flexible, like Doz, (1996) characterizes trust by dependability, predictability and faith and concludes that those relationships which are based on such kind of trust prove flexible in case of the decision making process and operations compared to those which doesn’t build on trust.

Hill, (1990) asserts that trust lessens the need of stipulations and monitoring while using contracts hence increasing the incentive to cooperate and eases the uncertainty. This argument is further supported by Nooteboom et al (1997) that since the trust lessens the requirement of complex contract writing and monitoring that makes the transaction inexpensive, more agreeable and more flexible in an uncertain environment. Similarly,
according to Ryu & Min, (2005) focal firm will not need to spend resources on the high level of controlling efforts if it confident that the exchange partner is trustworthy and it will not take the benefit of any uncertain environmental conditions. So the above discussion helps to draw the following proposition.

**Proposition 3: The positive association between the level of asset specificity-opportunism, asset specificity-transaction cost and uncertainty-transaction cost is attenuated under the high level of trust between the outsourcing party and the vendor/contractor.**

Based on the extensive literature review, research model in fig.3 is designed to explain the relationship between variables. The model will be explained empirically using three case study firms in order to investigate the risks and costs involved in offshore outsourcing and the role of trust as a mitigating variable.

![Research Model](image)

**Fig.3. Research Model**

### 3.4 Other risk and transaction costs management strategies:

Williamson, (1975) asserts that it is either possible or not possible to manage the risks associated to opportunism with outsourcing. If it is possible, then the potential of opportunism can be managed using a proper relationship strategy that integrates the safeguarding arrangement to control the risk of opportunism.
Few of the common strategies to manage the risks and transaction costs associated with outsourcing are explained below.

### 3.4.1 Contracts:

Macneil, (1978) asserts that Western economies use legal contracts as a safeguarding device. It defines the obligations of each party and gives the access to the court or state for the sanctioning of an opportunistic partner.

Most of the time if firms make relation-specific investments, then they use long term contracts in order to safeguard the investment, whereas if the environments are uncertain, then companies use contracts with short duration in order to be flexible. Further, if the transaction cost is high, long term contracts are used, but then the contracts are drafted incorporating the flexibility for example, price and quantity adjustment clauses etc (Lafontaine & Slade, 2010).

### 3.4.2 Relational norms:

Heide and John, (1992) claim that norms play a very significant role in the relationship governance among independent firms. Norms such as norms of flexibility and norm of information exchange supports the partner whose assets are on risks in the relationship by giving it the vertical control. Here flexibility means that both transacting parties will make modifications to the original contract readily and the norm of information exchange refers to the shared value that supports the behavior of full disclosure among transacting parties. Absence of such norms makes the partner with specific investment dependent on the party controlling the assets and the investor party loses control. In other words, in a trade relationship, relational norms play the role of a protecting device against the opportunistic behavior. Joshi, (1998) claims that in the case of low relational norms in a relationship, relatively dependent manufacturer uses the opportunism to defend against a more powerful supplier.

### 3.4.3 Multi vendor strategy:

According to Mathew (2008), companies can balance the power and reduce the dependency by using a multi-vendor sourcing strategy. It helps to get out of the lock-in situation and reduces the switching cost for the client firm. As Heide, (2003) depicted that multiple sourcing helps the buyer to compare the performance of the focal vendor with other vendors. Buvik and Anderson, (2011) also claim that multiple sourcing strategy is a
safeguarding device in its own and reduces the chance of opportunism on supplier side which results in less controlling efforts are required by the buyer.
4.0 Research Methodology:

Fig.4  Research Onion Adopted from Saunder et al (2009, 138).

4.1 Research philosophy:

4.1.1 Why it is important:
This term is based on the development and nature of the knowledge in a particular field. Developing a new knowledge does not only mean that a new theory is developed rather if it carries a purpose of answering one definite problem in a specific organization also falls into this category. Research philosophy holds vital assumptions through which the researcher views the world. These assumptions, supports the research strategy and the methods used being the part of the strategy. Philosophy is influenced by practical consideration. The view of the researcher about the relationship between the knowledge and the process from which it is built up has the most influential role over the philosophy being adopted (Saunders et al, 2009). According to Johnson and Clark, (2006) important is not to be familiar with the philosophy in use instead the way the philosophical choices are
defended and compared with the available alternatives. Sanders et al, (2009) describes four research philosophies, including, interpretivism which will be proposed philosophy of this research.

4.1.2 Pragmatism:
This philosophy is related to the findings and practical consequences of the research. It states that one viewpoint cannot give the whole picture; there are many realities which can exist. It does not mean that the pragmatic philosophy based research will be carried with multiple data collection methods and analysis practices rather the pragmatic researcher will use such research design that supports the relevant, reliable and credible data to be collected for subsequent actions (Saundar & Tosey, 2012-2013).

4.1.3 Realism:
This philosophical position is related to scientific enquiry and states that despite the fact that a researcher’s observation are influenced by worlds’ views and its own experiences but what he/she senses is the truth. In other words reality presents irrespective of the mind involved (Saundar & Tosey, 2012-2013).

4.1.4 Positivism:
A logical positivist is concerned with the outcomes by observing and predicting them like a laboratory scientist to get a law-like generalization for example cause and effect (Remenyi et al, 1998). Scientific methods are being used to develop and test the theories. Data is highly structured obtained from a large sample and quantifiable and cannot be influenced by the researchers’ values. Usually the statistical methods and hypothesis testing fall into this category.

4.1.5 Interpretivism:
It takes into account the difference between the humans as a social actors’ roles. This stress is to carry the research on people rather than the objects. This role playing can be resembled with the parts played by the actors in the theater, where actors play a role according to their interpretation. Similarly, we interpret our roles and others’ according to the meaning we want to give. Interpretivism has roots in two academic beliefs, i.e. symbolic interactionism and phenomenology (Saunder et al, 2009).
4.1.5.1 Symbolic interactionism:
Saunder et al, (2009) describe this type of philosophy that humans are in constant process to interpret the world of society surrounding them. When humans interact with others, they interpret the actions of each other. This interpretation results in modification of their meaning and actions.

4.1.5.2 Phenomenology:
It refers the human approach in which they make sense of the surrounding world. Saunder et al, (2009). Cohen et al, (2005, 22) define it as “a theoretical point of view that advocates the study of direct experience taken at face value; and one which sees behavior as determined by the phenomena of experience rather than by the external, objective and physically described reality”. According to Remenyi et al. (1998) phenomenologist dissimilar of positivist take the world carrying the subjective reality rather objective. Where every condition is considered exclusive and circumstances and individuals is a function of it.
The phenomenology approach requires the researcher to broaden the boundaries of the study of a particular situation in order to get the reality or the driving reality. The researcher makes a meaning about the study of the situation and he knows that the world does not have a single objective reality, rather it is a set of multiple realities (Cohen et al, 2005) and all of them should be taken into account. The phenomenologist is less concerned about the lack of ability of his work to be law-like generalization. In the interpretive school of thought phenomena is the center and the fundamental nature of phenomena is understood instinctively. Unlike the positivism approach it is not possible to define the a priori steps in the phenomenology study. Every step of evidence collection opens the way to the subsequent step. Rich descriptions become the building blocks for the researcher’s argument. The phenomenology approach in research is a holistic view so it becomes hard to replicate the study and generalizations. But validity can be claimed if somehow similar studies are conducted and they produce consistent results which aid an emerging theory.

4.2 Approaches:
Following the research onion by Saunder et al (2009) the next level of research is defined the research approach. The research approach is decided based on the theory developement. There are two kinds of approaches, namely deductive approach and inductive approach.
4.2.1 Deductive approach:
It means the degree of clarity about the theory in the very beginning of the research which leads to hypothesis development, choosing a research strategy and then hypothesis testing. It will become the guiding approach for this research.

4.2.2 Inductive approach:
It starts with data collection and then theory development as a result of data analysis.

4.3 Research strategy:
As research philosophy and research approach are influential over the way how the research questions will be answered in the same way research question also define the research strategy to be chosen (Saunder et al, 2009). Yin, (2003) asserts that every strategy is used to conduct the three kinds of studies, i.e. exploratory, explanatory and descriptive. Exploratory study is helpful to find out “what is happening; to seek new insights; to ask questions and to assess phenomena in a new light” (Robson, 2002, 59). Whereas the study of cause and effect relationship among variables is known as explanatory research. Robson, (2002, 59) defines descriptive research as “to portray an accurate profile of persons, events or situations”. Remenyi et al, (1998) assert that there are four factors influencing the choice of research strategy that include research question, budget, time and skills of the researcher. Within all, the research question is the most important. According to Saunder et al, (2009) following tactics can be adopted to answer the research questions.

- Case study
- Survey
- Experiment
- Grounded theory
- Ethnography
- Action research
- Archival researches

4.3.1 Case Study:
For this study of offshore outsourcing risks, time, budget and research questions have influenced to adopt the case study method. Further the nature of research and tools implemented, make this investigation as case study research. Yin, (1989) defines case study as “an empirical enquiry that investigates a contemporary phenomenon within its
real life context, when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used”. In other words case study is a research strategy which is composed of a comprehensive technique which covers the logic of the design, technique of data collection, and particular perspective to data analysis. Bell, (1993) describes the case study methodology as the umbrella expression for all kinds of research techniques where the common aim is to investigate around a particular event or case. The idea behind this methodology is that at times just by looking cautiously into some real-life occurrence can give a whole picture of the real relations between procedures and variables. According to Remenyi et al, (2002) case study helps to get a holistic view of the longitudinal case studies or cross sectional relatively easily if compared to other approaches of research. Hitchcock and Hughes (1995, 322) have identified the following hallmarks of the case study research.

- It involves the case relevant events which carry the affluent and brilliant description.
- It gives a sequel story of the events relevant to the case.
- It highlights the explicit events relevant to the case.
- It merges the depiction and analysis of events relevant to the case.
- The main focus is to understand the perception of individual actors or group of actors.
- The researcher is completely involved in the case.
- While writing the report an effort is made to expose the richness of case.

Case study research becomes particularly significant if the research purpose is to get a rich understanding of the situation in question and the processes being endorsed (Morris and Wood, 1991). Case study research is used to answer the ‘how’, ‘why’ (Saunder et al, 2009; Yin, 2014) and ‘what’, although the ‘how’ and ‘what’ fall into the survey strategy but it can be answered in the case study under exploratory and explanatory research. (Saunder et al, 2009). Cassell & Symon, (2004) assert that case study strategy is perfectly suited for in depth exploration of issues which leads to the construction of new theories. Remenyi et al, (2002) the critics of case study method include bias and incomplete evidence. While Yin, (2014) has addressed a few concerns for the case study methods, among them is the lack of rigor-not following the precise procedures, inability to generalize the findings from case study research and too long to complete with massive documents to read.
4.4 Choices:

The next layer of research onion by Saunder et al, (2009) is about research choice among qualitative data collection techniques and corresponding data analysis method or quantitative data collection techniques and corresponding data analysis procedures. They have described many categories of research choice i.e. mono method (single qualitative or quantitative data collection technique and data analysis procedures, multiple methods (more than one qualitative or quantitative data collection technique and data analysis procedures), mix method (when both qualitative and quantitative data collection technique and data analysis procedures are used). The data collection technique which is deployed here is mix method which has characteristics of both qualitative and quantitative data collection techniques. Yin, (2014) & Remenyi et al, (1998) identified six sources of evidence collection which include documents, interviews, direct observations, physical artifacts, archival records, participant-observation situation. In this study information is collected via semi structured questionnaire and interviews in order to get the elementary idea regarding sample case companies. Further, they have given three guiding principles to collect the evidence to get the maximum benefits out of them. They are; using multiple source of evidence, creation of case study database, maintenance of chain of evidence, carefully using data from electronic sources.

4.4.1 Using multiple sources of evidence:

Remenyi et al, (1998) asserts that case studies are mostly conducted within single research body for example, one organization or government department so it becomes fundamental clear to use multiple sources of support. Multiple sourcing helps in the issue of construct validity as it offers numerous measures for the similar event. Further it helps to reach a conjunction point for the information collected. Yin, (2014) has used this concept as triangulation, and discusses that while doing case study research it is not recommended to use a single source of evidence. In one case study methods’ analysis revealed that case studies with multiple sources of evidence are rated higher than the one with single data collection technique. So in order to validate this study two sources of data collection are used i.e. semi structured questionnaire and interview. The researcher had three interviews, one on interview was conducted on the facility of company A, which took 1:54:44 (one hour fifty four minutes and forty four seconds) the respondents also filled the interview along with the interview which helped to better understand their point of views regarding each question in the questionnaire. The interview with company B was carried out after
receiving the questionnaire on Skype, it took 1:07:56 (one hour seven minutes and fifty six seconds). Whereas the third interview was also conducted after receiving the questionnaire on Skype, and the length of the interview was forty 00:41:33 (forty one minutes and thirty three seconds). Furthermore the emails were also used if the researcher had any ambiguity regarding the answer. Some information was also collected from the websites of three case companies to get to know the proper functions of the firms.

4.4.2 Create a case study database:

The second principle is related to the manner by which data collected for case studies is organized and documented. The database’s main function is easy retrieval of documents and evidences when need. It helps the external users as well as the researcher itself for convenient use while data analysis. Field notes, case study documents, tabular material are considered important while making case study database. One important feature of research answers that they attach the relevant subjects-with proper quotation-to explicit proof. Remenyi et al, (1998) assert that it should be make sure that no evidence has lost or omitted. If rules are followed then it enhances the construct validity and quality of the case. The researcher also made a separate folder where all the documents, articles, interviews and questionnaires from sample case companies were held in order have easy retrieval.

4.4.3 Maintain a chain of evidence:

This principle allows the external observer or reader of the case study to follow the source of any proof beginning from the research questions till the end of case study in the conclusion. It includes the proper citation of report to reach a conclusion and if these sources are inspected original evidence must be found. Furthermore while the data collection process if the case study protocol is followed the desire of chain of evidence is fulfilled (Yin, 2014).

4.4.4 Exercise care when using data from the electronic sources:

According to Yin, (2014) six sources of evidence i.e. documents, interviews, direct observations, physical artifacts, archival records, participant-observation can also be characterized by electronic sources. For example interviews collected through Survey Monkey, online chat, online group dialogue etc. The electronic sources are gate ways to sources of evidence and previous researches/studies. While using these sources intensive caution is mandatory. First caution can be setting some limits about the time to spend on
drilling and navigation, prioritizing and getting idea for the information’s centrality. As the number of electronic sources and information available on them is enormous, cross checking the sources to detect the correct slant, incompleteness or biasness in the work of researchers becomes necessary. This study has also focused to read the work of author even if they are referred in other author’s research work. Third caution stems from the accuracy of information collection for instance the claims of authorship, times or places to materials cannot be genuine so the researcher should be very skeptical and careful about this aspect (Yin, 2014).

4.5 **Time horizon:**  
Following Sauder et al, (2009) the next layer of research onion is related to two different types of time horizons that is cross sectional and longitudinal. Times horizon are independent of strategy or method adopted and it depends on the research question that which time horizon fits best. Longitudinal is the study about the change and development over a period of time.

4.5.1 **Cross sectional:**  
The characteristics of this study make it a cross sectional. Saunder et al, (2009) describe it as the study of a phenomenon over a certain time. Mostly the academic researches are time constrained so the cross sectional becomes most appropriate.

4.6 **Data analysis:**  
Yin, (2014) asserts that case study analysis is the most difficult stage of all the levels. It is not like the statistical examination with fixed formulas like cook book recipes instead most of time it depends on the careful empirical thinking of the researcher with appropriate evidence presentation and rigorous contemplation of substitute analysis. The needed strategy guides in data analysis. It follows cycles including components like research questions, data, interpretation of data, statement of findings and conclusion. In this way the researcher can move backward or forward to draw some strategy. There are four general strategies for this purpose including working from the data from ground up, developing a case description, examining plausible rival explanation, relying on theoretical propositions. Working data from the “ground up” is an inductive approach where data is collected first without any set propositions in mind and by ‘playing with the data’ useful concepts emerge. Developing a case description is another strategy where case study is organized according to some set descriptive framework and serves as an alternative if the first
strategy and the strategy of relying on theoretical propositions does not fit. The basic idea behind this is without any set propositions if data has been collected in a large amount and after ‘playing with the data’ no new concept emerge then this strategy is used. The third strategy is examining plausible rival explanations, which is generally used in combination with relying on theoretical propositions, working data from ground up and developing a case description strategies.

4.6.1 Relying on theoretical propositions:

This strategy is based on the theoretical propositions that lead the case study. Basically the propositions define the objectives and design of the case study which further reveal the research questions, literature review and new hypothesis or propositions. Propositions define the data collection plan and also result in data analysis priorities. As this cased study is an explanatory one, so propositions will be drawn from the exiting literature and then in the analysis phase pattern matching technique will be used (Yin, 2014).

4.6.2 Analytic techniques:

According to Yin, (2009) five techniques are available to analyze the data collected. They include pattern matching, explanation building, time series analysis, logic model and cross case synthesis. The most relevant technique for the analysis of this case study is pattern matching that will be used in this research.

4.6.2.1 Pattern matching:

Pattern matching is a technique that is based on a comparison of an empirically derived pattern with the predicted pattern. If the pattern matches, the internal validity of the case study is strengthened. If the case study is an explanatory then the pattern matching will relate to the dependent and independent variable. There are two forms of pattern matching; one is nonequivalent dependent variables as pattern and rival independent variable as a pattern (Yin, 2014).
Chapter 5

5.0 Research Design:

Yin, (2014) ascertains that research design is part of every empirical research whether implicitly or explicitly, it is the rational sequence that joins the observed data to the research questions and finally to the conclusions. Research design is defined as the “a logical plan for getting from here to there” (Yin, 2014, 28). In this description here means the research questions and where means the answers or conclusions for the initial set of questions. There are a number of key divisions of this plan in between here and there, including collection and analysis of data. According to Kerlinger, (1986, 279) research design is “the plan and structure of investigation so conceived as to obtain answers to research questions”.

According to Yin, (2003,2014) based on two discrete dimensions, there are four strategies that can be distinguished.

- Single vs multiple case study
- Holistic vs embedded case study

Single case study strategy is used where there is one case and it is critical, extreme or unique case, whereas the multiple cases means using cases more than one, the basic purpose is to compare the existence of one case’s findings in the other cases which results in the generalization of findings (Saunder et al, 2009). Coming back to Yin, (2003, 2014) multiple case studies are preferred tactics over the single case studies because they can be substantially beneficial in analytical conclusions. Further the multiple case study method gives the opportunity to contrast the situations and if the later findings hold up the assumed contrast then the results signify a robust beginning for the replication of theory, which strengthens the results against the single case study. The study, which is conducted to find out the management of offshore outsourcing and the role of trust also becomes a multiple case study as three companies are chosen. Coming back to the other dimension for unit of analysis is holistic against the embedded one. Where holistic design means if only the global nature of organization or program is examined whereas if there are a number of projects involved that constitute a program, embedded units no matter how they are selected will be called the embedded case study design. Five components that are significantly important in a research design:

1. Case study questions
2. Propositions, if any
3. Its unit of analysis
4. The logic linking the data to the propositions
5. The criteria for interpreting the findings

5.1.1 Case study questions:
This component of research design is related to form (how, why, who, what, where) and substance of questions. For example as discussed earlier that case study method deals with the ‘how’ and ‘why’ form of questions. Further Yin, (2014) has discussed how the research topic can be selected from literature within area of interest. By closely examining the new research questions emerge from the existing literature which can stimulate the researcher’s own thinking power and he/she can define new questions. The adopted case study topic was also selected somehow in the same way, the author had the interest in Transaction cost analysis. Apart from that from Norway’s point of view, offshore outsourcing has been a major strategy but mostly researchers came up in software development and IT outsourcing which left the room for research in manufacturing of tangible products. Yin, (2014).

5.2 Study propositions:
The propositions direct the focus towards the matter that supposed to be observed within the scope of the study. The research question doesn’t guide to what to study. They not only reflect the theoretical subject/topics but also help to search for the evidence from right source. As in this research, proposition were developed and they helped the researcher to develop the questionnaire to focus on the content that best serves the purpose of the study.

5.3 Unit if Analysis the---“case”:
There is a basic problem with defining the “case” (Yin, 2014). Dolma, (2010, 169) defines unit of analysis as “the entity that is being analyzed in a scientific research” He further explains different level of unit of analysis for instance individual level (students, employees, teachers, managers etc), group level (study group, work teams, departments etc), organizational level (business corporations, unions, army divisions etc), social artifacts and social interaction level (wedding, laws, constitutions etc). In this case study unit of analysis is on organizational level as it is a dyad of contractor/ vendor and the client involved in offshore outsourcing.
5.4 **The logic linking the data to the propositions:**

This component of research design is an indication of the data analysis phase. There should be an idea of choices of analytical techniques which can fit to the case study. All of the data analysis techniques i.e. pattern matching, explanation building, time series analysis and logic models serve the same purpose. Because on data analysis step, it will be required to combine or assemble the data which becomes the evidence of stated propositions.

5.5 **Criteria for interpreting a case study’s finding:**

The fifth component is mostly used with statistical analysis meaning the statistical findings become the criteria to interpret the findings. The alternate strategy is using the rival explanations to interpret the research findings. The more rivals rejected the stronger will be the findings of the research.

5.6 **Criteria to evaluate the quality of research designs:**

There are few tests which can be used to check the quality of the research design. The tests of validity and reliability (Yin, 2014).

5.6.1 **What is validity?**

The behavioral measure called valid if it measures what it tends to measure (Goodwin, 2009). According to Gronlund, (1981) in qualitative research the subjectivity, perspectives, opinions and attitudes all add to the biasness. In such case validity cannot be measured in absolute state rather it is measured in degree e.g. degree of validity.

5.6.1.1 **Construct validity:**

According to Goodwin, (2009) construct validity is if a test/ instrument measures the construct adequately or not where a construct is some supposed factor that has developed from theory to explain some phenomena or some set of behaviors. Construct cannot be directly examined so operational definitions need to be developed to investigate them empirically. Remenyi et al, (1998) asserts that it is a criterion for scale evaluation that is related to the question i.e. *what is the nature of underlying variable or construct measured by the scale?* Further he pointed out two steps which can lead to construct validity. 1. Identification of ideas, issue concepts, relationships which are subject of study with care.2. It should be made obvious that the adopted measure will deal with ideas, issues etc in real. Coming back to Yin, (2014) there are four tactics that can help to increase the construct
validity. First tactic is triangulation, this is relevant at the data collection stage, as using multiple sources of evidence gives the opportunity for convergent lines of enquiry. Second one is establishing a chain of evidence to express different links in the chain. In this case study research as qualitative methods have been used to test the empirical setting so sources of evidence has been used to increase the construct validity. A semi structured questionnaire has been designed by the researcher further interviews with the high rank professional; discussion with supervisor, literature review is conducted in order to converge the same finding. According to Gilbert and Ruigrok, (2010) if the author itself involves in the interview, it would assure the construct validity, so in this case study researcher, herself conducted the interviews from the respondents apart from that during data collection by questionnaire, she was directly in contact with the respondents via emails to avoid any ambiguity.

5.6.1.2 Internal validity:
Campbell & Stanley, (1963) define internal validity as “the basic minimum without which any experiment is uninterpretable”. It is concerned with explanatory and causal studies (Yin, 2014), therefore Rosenthal and Rosnow, (1991) define internal validity as the degree of validity regarding the statements about y which is caused by x. According to Remenyi et al, (1998) in business and management case study research the problem of internal validity is generalized to an extensive situation and the researcher can infer that a specific result is caused by a particular phenomena, without the availability of all the evidences. Yin, (2014) asserts about the inference that every time a case study involves inference because event cannot be directly examined. So based on interview and documentary evidence collection methods, the researcher will make an inference that a particular event is a result of an earlier incident. Furthermore, internal validity can be verified during data analysis phase of the case study for instance by doing pattern matching, explanation building, addressing rival explanation and using logic models.
There are eight different kinds of extraneous class of variables that should be controlled otherwise they will produce confounded outcomes with the results of experimental research design. They are history, maturation, testing, instrumentation, statistical regression, biases, experimental mortality, selection-maturation interaction. Few of them are discussed here like history is the first effect that is, if in addition to experimental variable, some events are occurring in between first and second measurement. Maturation is another variable in case if some sort of psychological changes occur during study for
example respondents get older, getting hungrier, getting older etc. Third variable is the effect of testing if the score of a second test is used to run a test, fourth one is the effect of instrumentation where the measurement instrument experience the change or the scores, observers get changed which influence the outcomes (Campbell & Stanley, 1963).

Gilbert and Ruigrok, (2010) ascertain the strategies through which internal validity can be assured. One such way is that a clear research framework should be established where the ‘y’ is an outcome of ‘x’ variable and not from third intervening variable ‘z’. Here the authors quote Yin by saying that if the theoretical framework is derived explicitly from the literature, in other words the relationship among variables should be describes diagrammatically or by verbal discussion. Pattern matching by matching the patterns of empirical findings with the predicted ones or already available in the previous studies. Third by triangulation for instance getting the multiple perspectives in order to verify the findings. In this research the findings of the research from three case studies is compared with the findings of previous case study findings. Further during data collection, analysis, interpreting the findings different bodies of literature is used.

5.6.1.3 External Validity:

External validity is related to the question of generalizability (Yin, 2014; Campbell & Stanley, 963; Cohen et al, 2005; Remenyi et al, 1998). According to Cohen et al, (2005, 109) external validity “refers to the degree to which the results can be generalized to the wider population, cases or situations”. Gilbert and Ruigrok, (2010) is of the view regarding external validity that theories’ perceptive should show the phenomena but must not confined to one setting (in which they are tested) rather they can also be equally effective in other settings. Yin, (2009) argues that single case study methods is a main obstacle for generalizability. Further survey methods use the statistical generalization whilst case study method relies on analytic generalization. Analytic generalization is based on the generalization of a set of results to a wider theory. Replication logic can be used in order to test the theory in second or third neighborhood to check the findings, in this way there is a strong support for generalizability of findings. Regarding the research questions, Yin, (2014) claims that the questions of ‘how’ and ‘why’ aim to document the common fashion in the region, country or city which is analytical generalizability. External validity occurs in the design phase of research process and at the time of identification of proper theory or theoretical propositions is the proper time to address the external validity. Gilbert
and Ruigrok, (2010) define some tactics in the case study research to point the external validity. Such tactics include properly explaining the rationale to use the research method i.e. case study and the rationale to use the particular industry and particular case.

5.6.1.4 Reliability:
Reliability is defined as “the extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability. In other words, if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable” (Joppe, 2000,1). According to Remenyi et al., (1998) it deals with the subject of consistency and stability of evidences and measures. Further their research claims the positivist will try to minimize the errors and biases to ensure the reliability but the phenomenologist can claim that all the situations are different so the same findings cannot be achieved again so reliability is not a major issue. Yin, (2009) has given two tactics to deal with the issue of reliability i.e. case study protocol and case study data base. Further if the case study research is documented in as many operational steps as possible then the reliability problem can be resolved. Silverman, (2005) describes the tape recording of face to face interviews and then carefully transcription, use of fixed choice answers, and for the data in the report use of long texts are all such ways that can handle the reliability issue. Gilbert and Ruigrok, (2010) view cautious documentation of research procedures along with clarification serves the role for transparency, whereas replication can be obtained through case study protocol and case study database which can be referred to retrieve any information if needed. According to Yin, (2014) data collection questions are the heart of the research protocol. So a semi structured questionnaire was developed to collect the data which can be found in the appendix.

5.6.2 Instrument development:
The scale items of measures in the questionnaire are adopted from established scales of asset specificity (Joshi and Stump, 1999), opportunism (Handle and Benton, 2012), environmental uncertainty (Buvik, 2002), technological uncertainty (Joshi and Stump, 1999, Q 16.1-16.2; Buvik, 2002, Q16.3; Heide and John, 1990, Q16.4), Ex-post transaction cost (Buvik, 2002, Q 17.6-Q17.7), role of trust (Ryu and Min, 2005), norm of information exchange (Heide and John, 1992, Q 13.1- 13.4) and norm of flexibility (Heide and John, 1992, Q14.1- Q14.3; Heide and Miner, 1992, Q14.4).
Chapter 6

6.0 Introduction to case companies:

In order to get the practical insight of the concepts being studied in the theory, such case companies were selected that were involved in the field of interest. Three case companies were chosen that are engaged in the offshore outsourcing. Although the size of the firms are not alike, but they share one common feature that is the production strategy / production approach. All three firms are involved in the tailor made solutions or in other words engineer to order (ETO). They are located in the Møre og Romsdal region of Norway. Although two of them are big players of the industry and their operations are in different parts of Norway, but one specific facility is being used as a case study. This chapter is important in this study as it will provide the details of the functions of the companies and how they are involved in the international business. Due to confidentiality reasons companies’ names are kept secret and replaced with letters A, B and C.

<table>
<thead>
<tr>
<th>Company</th>
<th>Types of solutions</th>
<th>Core competencies</th>
<th>Outsourcing Functions/activities</th>
<th>Offshore location</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Ship designing and building, including specialized vessels for the offshore oil and gas exploration for oil and gas industry</td>
<td>Administrative functions, Integration of designing, customer request for modification, communication, and final assembly in other words supply chain management.</td>
<td>Hull building, piping, painting, accommodation, Electro work</td>
<td>Romania</td>
</tr>
<tr>
<td>B</td>
<td>Producer of drilling equipment, Cranes, winches, winch</td>
<td>Engineering and supply chain management</td>
<td>Production of components for products</td>
<td>Korea, Poland, Italy,</td>
</tr>
</tbody>
</table>
Table 1.

<table>
<thead>
<tr>
<th>Country</th>
<th>Services Provided</th>
<th>Supplier Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>Systems and hose stations for fixed and floating offshore installations.</td>
<td>Asia e.g. Korea, almost all Europe e.g. Poland, Germany etc.</td>
</tr>
<tr>
<td></td>
<td>Designing and engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fabrication, Production and additional engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Heavy duty lifting and material handling equipment best suitable for marine environment.</td>
<td></td>
</tr>
</tbody>
</table>

6.1 Company A:

Company A is a shipyard and part/facility of a major shipbuilder and designer of specialized vessels in the world. It was founded in 1949. The main company has a workforce of 10000 employees in ten different facilities located in Norway, Brazil, Vietnam and Romania. Company A is one of the facilities of this company in Norway. It has approximately 129 employees. The parent company is renowned for building highly complex and customized offshore vessels. This tailor made or engineer to order solution makes the process of fabrication quite complex. Most of the customers are Norwegian shipyards. The designing is done in Norway and fabrication/production is carried out in Romania. The company has a logo that ships are not built for customer rather it is built with them that specifies the level of customer involvement in the ship development (Web source of company A, 2013). According to respondents the parent company has collaborations with the supplier in the Romania, so company A uses Romanian supplier as its focal supplier.

Further, the company’s logo also indicates that the contract cannot be written in complete as the customer can demand a change in the last stage of the ship development.

In a report of Nav, (2013) it is revealed that the due to the higher wage rate in Norway, shipyards mostly compete on innovative solution in the form of specialized vessels for offshore and trading purposes. Company A also specified the basic purpose of offshore outsourcing as the cost reduction and it is accompanied by focus on core competencies.
The respondent told in the interview that as ships are big structures that require a large number of labor force therefore it could not be done in Norway due to high wage/salary rates.

6.2 Company B:

It is part of a worldwide leader in manufacturing the equipments and components used in Oil and gas industry. For example components used in drilling and production of oil and gas. It also provides services such as oil field inspection and services related to the integration of upstream supply chains in oil and gas industry.

Company B started operating in August, 1946 with specialized production of onshore cranes. But from 1970 the company shifted its focus on offshore cranes and now it’s a global leader in producing offshore cranes, winches, winch system and hose stations for fixed and mobile offshore units. It has a workforce of 472 people. It also works on the basis of engineer to order strategy. Company designs the product for customer and outsources the components from Korea, Poland, Italy and Germany. The motives behind the outsourcing in near shore and offshore locations is mentioned as cost reduction, to focus on core competencies, the capacity enhancement and more importantly getting closer to the customer (web source of company B, 2014). As mentioned earlier that company serves the offshore oil and gas industry so it tries to provide the products whiles staying in proximity to the customers.

6.3 Company C:

It is an engineering company serving the offshore and marine industries with tailor made solutions for lifting and material handling equipments. The company was founded in 2004 and currently it has 50 employees. As this company is an engineering and service company, that designs the products and outsource all the fabrication from Europe and Asia so most of the workforce is comprised of engineers. The company divides its functions into two, i.e. lifting and handling equipment and services. In first category, company serve the maritime industry for focusing on offshore vessels, floating production, storage and offloading (FPSO) units, rigs/platforms. The second category relates to service, where the company C provides the engineering services concerning the designs of lifting equipments. The services include the engineering services such as the commissioning and testing of new or old equipments, supervision of installation, training courses, repair, and maintenance of spare parts supply (Web source of company C, 2014).
The reasons behind the adaptation of offshore outsourcing are access to knowledge and resources and to concentrate on core competencies i.e. engineering. As the production is outsourced from other countries/ offshore countries, the handling of vendors becomes substantial. Especially if the company is working on the principle of engineer to order so the study will be of great value because each project is different. That makes the specifications to be changed for each project.
Chapter 7

7.0 Analysis and Findings:

As this case study is based on the propositions, that have been defined in the chapter 3 of theoretical grounding and the analytical technique adopted was the pattern matching that was discussed in chapter 4. So the empirical results will be compared with the pre established set of propositions. There were three main propositions, including one sub proposition for the asset specificity. The questionnaire covers almost all of them, apart from this in the interviews; the respondents gave better insight into the questions posed in the questionnaire. There are few questions in the questionnaire that were linked to the management of risk. Nevertheless the interviews have disclosed many aspects that were not discussed in the questionnaire.

The three case companies have supported the idea that core competencies should be kept in the house while all other functions/ activities can be potential options for the outsourcing. For example company ‘C’ views its competencies in designing/ engineering so it outsources all other functions related to fabrication. Same is the case with company A and company B, that outsource most of their production.

<table>
<thead>
<tr>
<th>Company</th>
<th>Motivations of offshore outsourcing</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>• Cost reduction/ wage reduction</td>
</tr>
<tr>
<td></td>
<td>• To focus on core competencies</td>
</tr>
<tr>
<td>B</td>
<td>• Cost reduction/ wage reduction</td>
</tr>
<tr>
<td></td>
<td>• To focus on core competencies</td>
</tr>
<tr>
<td></td>
<td>• Capacity enhancement</td>
</tr>
<tr>
<td>C</td>
<td>• Access to knowledge and resources</td>
</tr>
<tr>
<td></td>
<td>• To focus on core competencies</td>
</tr>
</tbody>
</table>

Table 2.

While discussing the motives behind offshore outsourcing companies A and company B has identified to reduce the cost and to focus on core competencies. Apart from this company B solved the issue of capacity constraint by outsourcing; it is exploiting the capacities of its vendors which helped the company B to be able to deliver the maximum number of projects. Whereas company C’s main reasons to outsource are to focus on core competencies and to access to knowledge and resources, as it is an engineering company that just designs the products so it needed the plants and all other necessary equipment to
turn the designs into a tangible product. So far all three firms are completely satisfied with their decision to offshore outsource. In the next section the propositions will be analyzed.

7.1 Summary of the results:

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variables</th>
<th>Mediating Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
<td></td>
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<td>A</td>
<td>Average</td>
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<td>Avg-high</td>
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<td>B</td>
<td>Low-average</td>
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<td>C</td>
<td>Average-high</td>
<td>Average-high</td>
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<td>Table 3.</td>
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Proposition 1a:
The relation specific investments can stimulate the opportunistic behavior because the investor party gets into lock-in situation and the other party can take the advantage of this situation. In this research all three companies have identified that the vendors are selected on the basis of their competencies so all three companies do not need any special kind of investment in the physical assets. As in case of Company B, the driver of outsourcing is to enhance the capacity so that it can deal with maximum number of projects. Similarly, company C only designs the product so it needs that kind of supplier/contractor who is equipped with all the necessary machinery, equipments and who is specialized in its business. So company C doesn’t make any investments in the physical assets, but it trains the people of the contractor to make the product exactly according to drawings. Same is the case with company B that highly invests in teaching the vendor to make the components according to the requirement i.e. designs. As the company B provides the tailor made solutions and it needs to communicate the latest version of its design, because
customers can demand a change at any time during the production phase. So high level of effective communication channel has also been deployed in the relationship. Company B due to subsidiary of a major organization of the world enjoys the benefits of extensive and modern IT system for communication. It helps the most effective communication between company B and its vendors. Respondent from Company A told that they have ‘share point system’ between them and vendor in Romania for the communication and they have invested highly in communication channels. Although company C is also an engineer-to-order (ETO) firm but it has not invested in relation-specific communication channels. By taking the average of all the numbers identified by the respondents, Company A has average/medium asset specificity in the relationship with its vendor, while company B has made medium to high level of transaction specific investment. Whereas company C has low level of asset specificity involved in the relationship.

For the dependent variable of opportunism, company A has responded that the potential of opportunism is medium, if they do not monitor and detect the contractor/vendor. The respondent from company B told that if they do not monitor and detect, the potential for opportunism is medium to high. Whereas company C has an average to high level of potential of opportunism from its contractor. All three companies, have notified that if proper monitoring is not put into place the probability is very high that the contractor/vendor will withhold the information that can be beneficial for them. Further the all three companies feel that it is most probable that the contractor will use the proprietary information gained through this relationship to win new customers.

In the interview the respondent from company B has mentioned that if a single vendor is given the contract to make the whole product then it will know the product better than them and it can do forward vertical integration by developing itself as a competitor. Another opportunistic behavior is observed by company B, that its contractor prioritizes the client based on the payment and late delivery claims (LDC). So if a client pays a high amount then they will be given preference and other clients’ products can be delayed to manufacture and if a client has biggest late delivery claim, meaning the client will claim a big sum of money in case if its delivery gets delayed. So in this research the relationship has proven to be significant between asset specificity and opportunism especially in the case of company A and company B.

**Proposition 1b:**

As the relationship between two transacting parties require them to invest in the specific investment, the need to protect the assets at risk become crucial. Especially the relatively
dependent party who has invested more in the relation specific investment has to safeguard the assets. This is not empirically evident from the case companies. As in case of company A, the company is using captive outsourcing because its parent country has collaboration with the supplier in Romania so it doesn’t incur any transaction cost related to product modification, of prices/ payments, delivery schedules, functional and technical specification of the product but uses the variation order system. But the verification of product performance and cost requires a high level of resources. So overall they face low transaction costs. And the relationship between asset specificity and transaction cost seems insignificant in the case of company A. Similarly, company B also uses the variation order request to deal with product modification, delivery schedule, payments, etc. but it spends enough funds and resources on verification of product performance and cost associated with it. But overall the company bears low transaction costs and no direct association is proved in the study. As far as company C is concerned, although it also uses the variation order request, but contrary to other two firms it employs a high amount of resources to renegotiate with the vendor for product modification, vendor’s production and process, but cost, prices and product verification are not time and resources intensive hence all together the firm C has relatively greater transaction costs than company A and company B. The theory has not proven here in the case of company C as well.

**Proposition 2:**
The theory claims that there is a positive relationship between environmental uncertainty and transaction costs, as uncertainty increases it becomes necessary to modify the requirements in a relationship, hence transaction costs increase because of the renegotiation. In other words, there exists a positive connection between environmental uncertainty and the ex-post transaction costs. This has been partially supported by company A and company B but fully supported by the company C. Company A and company B face low to average level of environmental uncertainty. The interviewer from Company A told that since their clients are the Norwegian ship owner so the demand of their product/ vessels is dependent on the activity in the Nordic sea and it fluctuates highly, it has average level of competitive uncertainty but in order to maintain the recognition as building complex and customized vessels, it has to regularly modify the product designs and technology.

Company B uses a two year forecast so it is quite sure the demand size of its products, but the requirement and specifications can be referred as uncertain. Since the customers are from offshore oil and gas industry, which requires new technology for drilling, etc. So
being a supplier for this industry company B also needs to be advanced in technology, it
claims as the most technologically advanced products and no such threat from the
competitors is mentioned meaning little/ no competitive uncertainty. But overall its
transactions are conducted in a low- average environmental uncertainty.
The environment uncertainty for company C is average – high mostly arise from demand,
technology and competitive variables. As it has been discussed above that all three firms
uses a variation order system where any change in the requirements of the client is dealt
with. But the respondent from company C has mentioned that it spends enough funds on
renegotiation for product modification, price adjustments etc. So the relationship between
environmental uncertainty and ex-post transaction cost has strongly proved in case of
company C but it is partially supported by company A and company B.

Proposition 3:
As the literature suggests that trust plays a mediating role in case of asset specificity and
environmental uncertainty as both these variables lead to the issue of opportunism and
higher transaction costs. Company A regards its contractors/suppliers as highly trustworthy
on the basis of sincerity, support, competent to honor the agreement, welfare seeker for the
firm. In the interview as well respondents from company A told that their relationship is
based on trust, so they can expect that the contractor/ vendor will not get the advantage if
an opportunity becomes available to them. So for company A, it can be concluded that
trust plays a very significant role in the governance of outsourcing relationship while
limiting the negative consequences of asset specificity and environmental uncertainty. The
interviewee from Company B has mentioned that we believe our supplier to be competent
that’s why we chose them. Since the company is an engineer to order firm, so regarding
product modification the respondent told that it’s part of this game so it believes its
suppliers/contractors to be ready to help and support them if some changes/ modifications
need to be made. But it has issues regarding the conflict of interests. It suppliers don’t
prioritize the interests of company B over their own. Company B has challenge related to
oral and written commitments and this is because they prioritize the customer as well
based on the customer who pays them high and with highest LDC (late delivery claim), so
sometimes they agree to fix some problems but due to prioritizing issue they fix it late. So
overall the level of trust between company B and its suppliers is average to high and it has
proven its effectiveness on opportunism and transaction costs.
The respondent from company C has almost the same views about the trust and ranked the
level of trust in the outsourcing relationship as average to high. The respondent has told
that few of its contractors/ suppliers have a long relationship with them and they trust them when the respondent was asked about company B’s welfare’s influence on the supplier/contractor’s decision the respondent replied that I hope some of them they do, we have good relationships with them, we think about their benefits so they also keep our wellbeing in mind while making important decision. It is highly trusted by the company that due to changing circumstances the suppliers/ contractors will ready to make adjustments in order to maintain the relationship. So overall the case matches the proposition that trust helps to mitigate the transaction costs and opportunism as company C believes that it will not need to spend resources on renegotiation and drafting new contracts if the change is required. Further, they trust that some of their contractor/supplier do not misuse the proprietary information provided by company C.

7.2 Other risks and costs, mitigation strategies:

The theory suggests that long term contract is a safeguarding device against the threat of opportunism if it is occurs because of relation specific investments. As all of three firms are project based so they chose the supplier on the basis of the capabilities that best match with the requirements of the project. And they therefore train them so they can deliver what is required from them. The contract length mentioned by the respondents is company A uses less than 1 year, company B uses 3 year frame agreement, company C makes 1-2 year agreement. In these particular cases as the level of asset specificity is not very high so long term contracts are not deployed and it is the requirement of the case firms especially company B and company C because short term contracting make them flexible to chose the best suitable supplier of every unique case.

According to theory, multiple sourcing acts as a safeguarding technique against opportunism. The three companies also outsource from many vendors/ contractors, but their motives are different. For example, in the case of company A the supplier market holds few capable suppliers and so sometimes they use one and sometimes 2-3 suppliers and the reason is that they can be small suppliers which can support each other to get the job done. The supply market for company B and company C are very competitive with many capable suppliers. Company B uses multiple vendor strategy on the basis of 20% of the contractor’s total capacity. The reason to adapt this strategy is, it wants to protect the product from getting copied as if a contractor will make the whole product, it can copy it. Whereas company C often purchase from the same vendor/ supplier but it is free to select any supplier that qualifies on the requirements.
Relational norms have been considered as a protecting device against risks of opportunism. The relational norms show their effectiveness in the relationships between case companies and their vendors/contractors. As in case the relationship of Company A and it vendors is characterized by very high degree of information exchange and high level of flexibility. The questionnaire and interview confirms that the collaboration between company A and its supplier in Romania is highly based on information sharing as it is the demand of this kind of production i.e., engineer to order. Furthermore to develop the relationship direct meetings and phone calls are used very often, the idea is that relationship development is better nourished under face to face meetings rather than writing emails. In the same manner the norm of flexibility prevails in this relationship regarding the requests of changes, coping with fluctuating circumstances etc. Strong Relationship development with the service provider/ contractor can help to manage the risks in outsourcing. This is inconsistent with the research of Mathew, (2011) and Anderson & Narus, (1990).

As far company B is concerned its relationship also supports the relational norms. The firm has very high degree of information exchange and high level of flexibility in the relationship. The respondent says that they provide all the information which can help the contractors/ vendors and they also get the information if they need it. Moreover, as the inspectors are on the facilities of the vendors/ contractors so they have physical meetings once or twice a week and phone calls to Korea twice a week. The norm of flexibility also implies in the situation of this case company. The relationship features high level of flexibility to tackle the uncertain events, prices and product adjustments.

Company C regards the norm of information exchange as high and norm of flexibility as average in the relationship with its contractor /vendor. Information sharing is highly facilitated through daily meetings, phone calls, internet etc. And for the norm of flexibility the respondent says that the relationship is considered flexible but if product modification is taken, it depends on the time that when it is required for example if the production is about to complete then it will be impossible to do so. From all of the above discussion, it can be concluded that all three case companies embedded in the relational norm that helps them to mitigate the transaction hazards.
Chapter 8

8.0 Discussion and Conclusion:

8.1 Discussion:

In this section the application of theory to the case companies will be discussed in a more detail. As transaction cost analysis (TCA) was made the theoretical framework to evaluate the risks and transaction costs associated to the offshore outsourcing. In this particular study three propositions acquired support from the case companies while one was not supported.

<table>
<thead>
<tr>
<th>Propositions</th>
<th>Supported</th>
<th>Not supported</th>
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<tbody>
<tr>
<td>P1a</td>
<td>Company A, company B, and company C</td>
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<tr>
<td>P1b</td>
<td>Company C, but Partially supported by Company A and company B</td>
<td>Company A, company B, and company C</td>
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<td>P2</td>
<td>Company A, company B, and company C</td>
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Table 4. Pattern matching of propositions

The proposition related to asset specificity’s impact on opportunism is supported by the firms, meaning although the level of specific investments are not substantial but it does prove the positive association potential for opportunism. For all three firms have reported that there is a possibility that vendors/ contractors can use information gained through this relationship to win new customers and develop new products. Although the supplier markets for all three companies is very competitive, especially for company B and company C, which attenuates the likelihood of opportunism arising from the asset specificity as companies do not face hold up issues. The respondent from Company C has mentioned that the contractors/ vendors do not involve in such activities because it's not good for their reputation and future business that is in consistence with the views of Hill, (1990) who claims that being an economic value, the reputation has an impact on the future business because the firms will not enter into exchange with the party that has a question on its reputation. Further, as the markets move towards the competitive
equilibrium side, the invisible hand of market removes the opportunistic parties from the market. Even in the case of relation specific investments, the potential for opportunism gets lower.

For the second propositions as no direct association was supported empirically, although companies use monitoring like following up the production but they have not showed any such concern regarding the special arrangement for relation specific investments. The justification can be given from Heide and John’s (1992) point of view which revealed that in hybrid form of governance, the buying firms safeguard their assets through the development of norms such as the norm of flexibility, information exchange and solidarity. That gives the buying firm ability to control the decisions making of the suppliers. As far as company A is concerned due to captive outsourcing it has a strong trust and norms based relationship so that can be the reason that can explain the ‘no’ positive association between relation specific investment and ex-post transaction costs. Regarding company B and company C, the respondents have declared in the questionnaire and interviews that they have high to very high relational norms which relax the requirement of tight safeguarding arrangement for specific assets. Furthermore norms attached to the relationship becomes the enforcement mechanism in hybrid form of governance (Axelrod 1984). So it can be inferred that the relationship governance between all three companies and their vendors/contracts are not pure market transactions, but it falls in the category of hybrids. When the relational norms are coupled with the trust it helps to reduce the risks, as claimed by Nooteboom et al, (1997) that trust reduces the risks and if it is not present in a relationship it can be developed through shared norms and values, further it can become source of cooperation.

If the third proposition is discussed here then, company A and company B partially support the theory whereas firm C fully support the statement that increased level of uncertainty enhance the ex-post transaction costs. The reason can be that as both firm A and firm B are parts of big players of their respective industries so they can enjoy the economies of scale for the communication and coordination costs whereas small firms as studied by the Carmel and Nicholson, (2005) that due to offshore locations small software outsourcing firms face the challenge of high communication and coordination costs becomes substantial. They further explain that although small firms managed to identify the potential opportunism but need to spend quite a lot of funds on the controlling arrangements. That can be one reason for strong support for proposition three by firm C.
Moreover, case companies govern by both legal contracts and trust. As Barthelemy, (2003) calls the contract as hard side and trust as the soft side of outsourcing and he concludes that in Information technology (IT) outsourcing using combination of hard and soft sides can make the outsourcing successful. All three sample firms are using a contract that is fixed price plus variation order system which better manage the risks and costs associated with environmental uncertainties whereas trust and relational norms are mitigating the risks and costs associated to transaction specific investments.

8.2 Conclusion:

The aim of this research is gained through evaluation of empirical findings from the lens of theoretical framework. The dimensions of Transaction cost analysis (TCA) were applied to evaluate the risks and costs factors of offshore outsourcing. The risk in the TCA’s framework is the opportunism whereas the costs are transaction costs especially ex-post transaction costs. The two dimension of transaction i.e. asset specificity and environmental uncertainty (Rindfleisch & Heide, 1997) was used to draw the propositions as they were referred as the antecedent of opportunism in the previous researches. The explanatory case study was conducted within three firms of Møre og Romsdal region. The results reveal that asset specificity does influence the opportunism and environmental uncertainty has significant impact on the ex-post transaction costs. But the empirical evidence contradicts with the theory for the impact of asset specificity on transaction costs. The relationship between case firms and their supplier is characterized by trust and relational norms which is the feature of hybrid governance structure. And these factors seem to reduce the potential for opportunism and safeguarding arrangements against the relation specific assets. Furthermore the importance of legal contract to deal with the uncertainty is enormous in the selected cases. Another important finding is the influence of reputation that can be safeguarding device against the risks of opportunism given that the supply market is competitive.

8.3 Further research:

The limitation of this study can take into account for future research, for example, due to size of sample no statistical test could run, which means that there are a few variables which does not have mutually exclusive influence over the dependent variables, for example as Aubert et al, (2004) quotes Williamson that there is an interaction between asset specificity and uncertainty. If there is no uncertainty surrounding the transaction,
then the relation specific assets are not a problem as they can be protected by long term contracts. So the idea is that further research can be based on a sample of a large number of firms so that statistical methods can be used to check the interdependency of different tenants of TCA to check how firms are managing offshore outsourcing.

This research has included the client’s or buyer’s point of view, but in fact if the supplier/contractor’s points of view is added that it can be an interesting topic for further research.
References


Appendix

Questionnaire:

Part 1. Questions about your firm.

1. General information about your company as an offshore outsource client.
   1.1. Numbers of employees in your company (approx.) _______________
   1.2. Year your company was founded ______________________
   1.3. Function or title of your company___________________________
   1.4. How many customers do you have (approx.)? _____
   1.5. Does your company possess any shares in Focal vendor’s equity capital?
      Yes. Indicate approx share____________________
      No.

2. What kind of functions does your company outsource?

3. What was the purpose/motive of offshore outsourcing?
   3.1 Cost reduction/wage reduction
   3.2 Access to knowledge and resources
   3.3 To focus on core competencies
   3.4. Capacity enhancement
   3.5. Other, please mention___________________

4. To what extent have you satisfied with the achievement of objectives for which offshore outsourcing strategy has been adopted, based on the above question?
   1. Dissatisfied 2. Partially satisfied 3. Completely satisfied

5. Do you keep some productions in house apart from offshore outsourcing?
5.1 If yes, what is the purpose? What are the benefits you seek by retaining some capabilities inside?

5.2 If you have retained some operations internally, how satisfied are you with the performance of the internal versus the external function based on the cost of managing the transaction inside and benefits you seek for?
   1. Dissatisfied  2. Partially satisfied  3. Completely satisfied

6. **Prior to offshore outsourcing, how many potential vendors were available in the market?**

7. **Do you use a single contractor/vendor or many for the offshore outsourcing of the process?**

   7.1. If either case, what is the reason to adapt to that strategy?

8. **Opportunism:**

   To what extent do you agree/disagree with the following statements.

   Strongly disagree (1) , strongly agree (5)

   8.1. If we don’t monitor and detect the FOCAL CONTRACTOR/VENDOR, it will not employ the best people to our job (Handley and Benton, 2012).

   8.2. If we cannot detect, the FOCAL CONTRACTOR/VENDOR will not deploy agreed to level of resources (Handley and Benton, 2012).

   8.3. If we cannot detect, the FOCAL CONTRACTOR/VENDOR will withhold information which can be beneficial for us (Handley and Benton, 2012).

   8.4. If we cannot detect, the FOCAL CONTRACTOR/VENDOR doesn’t invest in the employee training which was agreed upon (Handley and Benton, 2012).

   8.5. If we cannot detect, the FOCAL CONTRACTOR/VENDOR will delay making investment in new technology (Handley and Benton, 2012).
8.6. If we are unable to detect, the FOCAL CONTRACTOR/VENDOR will use the proprietary information gained through this relationship to win new customers in the market place (Handley and Benton, 2012).

8.7. If we are unable to detect, the FOCAL CONTRACTOR/VENDOR will use the proprietary information gained through this relationship to develop new products which our company could offer to the market (Handley and Benton, 2012).

8.8. The FOCAL CONTRACTOR/VENDOR makes changes to the fact little bit in order to get what it wants (Wang, 2002).

8.9. Any other forms of opportunistic behavior you have faced, would you like to mention please?__________________.

9. Have you experienced any issues because of information asymmetry, meaning the FOCAL CONTRACTOR/VENDOR has more information/knowledge than you?

10. Asset specificity: (Adopted from Joshi & Stump, 1999)

To what extent do you agree with the following statements.

Strongly disagree (1) ,strongly agree (5)

10.1. Our company has invested significantly in the training and qualifying the FOCAL CONTRACTOR/VENDOR..

10.2 Our company has invested significantly in the specific equipment installed at FOCAL CONTRACTOR/VENDOR’s site.

10.3 Our company invested heavily in the creation of effective communication channels between our company and the FOCAL CONTRACTOR/VENDOR.

10.4 To cope with the unpredictable demand fluctuations we need to invest in the excessive capacities sometimes at the CONTRACTOR/VENDORs’ sites.

11. Contract:
In the case of an outsourced activity, what was the duration of the contract with the contractor/vendor?

1. Less than 1 year  
2. 1 - 2 year  
3. More than 2 years

Governance mechanism

12. Norm of information exchange (Heide and John, 1992, questions 1-4)

Please, specify to what extent you agree with the following statements

Strongly disagree (1), strongly agree (5)

12.1 It is expected in our relationship with FOCAL VENDOR that any information that is useful for the other party will make available to them.

12.2 Apart from presepecified agreement, information exchange, in the relationship with our FOCAL VENDOR takes place very often.

12.3 Regarding proprietary information, It is expected that your company and the FOCAL VENDOR will provide it if it can help the other party.

12.4 It is expected that your company and the FOCAL VENDOR keeps each other informed about events or changes that may affect the other party.

12.5 Besides communication via IOS with our FOCAL VENDOR, we have set up other means of communications such as personal meetings and phone calls.


The following questions refer to the extent of flexibility of your relationships with the FOCAL CONTRACTOR/VENDOR

Strongly disagree (1) – Strongly agree (5)

13.1 Regarding requests for changes, the relationship between our company and FOCAL CONTRACTOR/VENDOR considered very flexible.

13.2 To cope with changing circumstances, it is expected that our company and FOCAL CONTRACTOR/VENDOR vendor will be able to adjust in the ongoing relationship.
13.3 If any unexpected condition occurs, our company and FOCAL CONTRACTOR/VENDOR would rather make a new agreement than hold each other to the original terms.

13.4 If it is considered essential, Changes in “fixed” prices are not precluded / prevented by the parties.

14. **Environmental uncertainty:**

To what extent do you agree/ disagree with the following statements.

Strongly disagree (1), strongly agree (5)

14.1. Our end product’s demand varies constantly (Buvik, 2002).

14.2. The condition of our FOCAL CONTRACTOR’s/VENDOR’s market is very unstable (Buvik, 2002).

14.3. The most important competitors in our market bring out new products frequently and makes modifications to existing products regularly (Buvik, 2002).

15. **Technological uncertainty:**

To what extent do you agree/ disagree with the following statements.

Strongly disagree (1), strongly agree (5)

15.1. Our firm uses standardized and conventional production technology. The supply market is based on the well established and standardized production technology (Joshi & Stump, 1999).

15.2. Due to changing customer demand, our firm and FOCAL CONTRACTOR/VENDOR have to regularly modify the product designs and update the technology in order to stay competitive (Joshi & Stump, 1999).

15.3. The product which is outsourced from this FOCAL CONTRACTOR/VENDOR is a highly innovated product with short life cycle (Buvik, 2002).
15.4. It is hard for our company to forecast accurately technological changes in
the end product of our company (Heidi & John, 1990)

16. **Ex-post transaction cost:**

How would your company evaluate the current level of your time and resource costs in the
mentioned below areas of interaction with your focal contractor/vendor?

Strongly disagree (1), strongly agree (5)

16.1 We spend a lot of time and resources to renegotiate for the product’s design
modification with the main vendor.
16.2 We spend a lot of time and resources to renegotiate over the prices and payments
with our main vendor.
16.3 Renegotiation for the delivery schedule is very time consuming and resources
intensive.
16.4 We use a lot of time and resources to renegotiate over functional specifications of the
product we purchase from our main vendor.
16.5 We employ a lot of time and resources to renegotiate over the technical
specifications of the product we purchase from our main vendor.
16.6 We spend a lot of time and resources to verify product performance and costs from
the main vendor (Buvik and John, 2000).
16.7 Our firm uses too much time and resources on controlling the vendor/contractor’s
product and production processes (Buvik, 2002)

17. **Role of trust:**

To what extent did the relationship with the contractor/vendor rely upon
collaborative mechanism such as trust, please select from the following.

Strongly disagree (1), strongly agree (5)

17.1 When it comes to make important decisions, FOCAL
CONTRACTOR/VENDOR keeps our welfare in mind (Ryu & Min, 2005).
17.2. We can depend on the FOCAL CONTRACTOR/VENDOR’s support when it comes to things which are imperative to us (Ryu & Min, 2005).

17.3. When environment/situation change, it can be believed that the FOCAL CONTRACTOR/VENDOR will be ready to hold up and aid us (Ryu & Min, 2005).

17.4. We can count on the sincerity of the FOCAL CONTRACTOR/VENDOR (Ryu & Min, 2005).

17.5. The FOCAL CONTRACTOR/VENDOR keeps all its promises/agreements, whether written or oral (Ryu & Min, 2005).

17.6. FOCAL CONTRACTOR/VENDOR is believed to be competent to carry out according to an agreed contract.

Thank you so much for your participation. You can contact me if you find any confusion about any question. My email address is rakhshanda.tabassum@stud.himolde.no