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## **A comparative study of the domestic and offshore contexts of IT Outsourcing: a risk based perspective**

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### **Abstract**

IT Outsourcing (ITO) nowadays is a common initiative among companies across different business branches. Technological advancements have made IT a broad field of application which requires extensive operation by IT departments of any company. The companies need to remain competitive in the marketplace and in order to do that they have to free up their resources from routine IT tasks. This can be achieved through ITO. Companies have the choice to engage either in domestic or offshore ITO operations. Those operations are associated with certain amounts of risk if the operation is not managed properly. The nature of ITO risks is comparable in both ITO contexts while at the same time some risks are specific for one of the ITO contexts. Usually the offshore ITO operations are seen as more dangerous and prone to failure.

The purpose of this study is to identify decision parameters in choosing between different IT Outsourcing alternatives. The purpose is achieved through finding out whether there are differences between the offshore and domestic context of ITO based on risk comparisons. A framework of risk profiles for both ITO contexts was developed. Risk severities were assessed through qualitative interviews with experts within the ITO field.

It was discovered that from the risk perspective there are differences between the two ITO contexts. The empirical findings suggest that ITO operations are prone to similar problems in both ITO contexts. Findings further imply that companies must exactly know what they have and what they want to outsource and create a viable relationship with the IT supplier disregarding the ITO context.

Key words: risk, IT outsourcing, domestic IT outsourcing, offshore IT outsourcing

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## 1. Introduction

*In this chapter the background and problem area are presented. Next the purpose of this research is stated and research questions are posed. Thereafter the delimitations of the thesis are presented.*

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Outsourcing is not a new topic. It is often called the “make-or-buy” decision (Ellram et al., 2008). Outsourcing has been used by companies in various industries for many decades (Ghodeswar and Vaidyanathan, 2008). Companies have outsourced production lines, business services, cleaning, catering, accounting, payroll and other business processes (Ghodeswar and Vaidyanathan, 2008; Kern and Willcocks, 2002; Currie and Seltsikas, 2001). Traditionally outsourcing was considered by companies to rapidly improve performance and reduce operating costs (Ghodeswar and Vaidyanathan, 2008). Outsourcing allowed companies to focus on their core business processes and build strategic advantage over competitors. Mostly it has been seen as a way to cut down on the costs and conduct the outsourced work more effectively (Stauss and Jedraszcyk, 2008). Currently companies are using strategic and transformational outsourcing to gain improved business focus, mitigate risks, build sustainable competitive advantage, extend technical capabilities, and release resources for core business purposes (Bartell, 1998, in Ghodeswar and Vaidyanathan, 2008; Logica Transformational Outsourcing). Companies have an option to engage in *offshore outsourcing* where the process or asset of an organization is outsourced to a third party supplier located on a different continent or in a different country or engage in *domestic outsourcing* where the process or asset of an organization is outsourced to a third party supplier located in the same country as the client.

One of the business assets which is most regularly outsourced is IT (Ghodeswar and Vaidyanathan, 2008). Technological advancements in the field of IT has made it a broad field of application which requires extensive operation by company’s IT department while global competition and technological advancements have forced companies to become more efficient and to strategically reposition themselves in the competitive marketplace (Djavanshir, 2005). In order to achieve efficiency and be able to reposition themselves companies must free up their resources from the routine IT tasks which can be managed through IT outsourcing (ITO). Outsourcing provides a potential path to price reductions and increased flexibility, allowing firms to convert fixed costs into variable expenses, and increase their economies of scale (Ellram et al., 2008). Prior studies show that short term price savings continue to be a predominant reason for both offshore and domestic outsourcing (Ellram et al., 2008). IT outsourcing market’s estimated worth in 2008 was 58 million \$ (E-business strategies 2006, in Rottman et al., 2007) and is expected to grow as ITO will create new jobs (Djavanshir 2005).

In recent years many companies have increased the use and dependence of outsourcing (Deloitte, *The Risk Intelligent Approach to Outsourcing and Offshoring*). ITO itself has been present since the 1960s though back then it involved only simple operations like time sharing which involved buying computer time by companies (Barthelemy and Geyer, 2005). The first ITO was technology- centric which also involved management of mainframes and was a domain of big corporations (Curries and Seltsikas, 2001). The simple form of ITO continued until 1980s when the much heralded contract between IBM and Kodak was signed in 1989 (Barthelemy and Geyer, 2005; Applegate and Montelagre, 1991, in Kern and Willcocks, 2000). Since

then ITO has grown in importance for companies and has gone global due to a number of political, economical and technological reasons (Currie and Saltsikas, 2001). ITO is no longer restricted to small and medium sized companies which do not possess their own IT Infrastructure (Barthelemy and Geyer, 2005). The accessibility of application and services allows small and medium companies to benefit from ITO. The “new” IT outsourcing form is characterized by a greater range and depth of services being outsourced; people and equipment are transferred to the supplier; suppliers often accept profit and loss responsibility; the nature of the (outsourcing) relationship with suppliers evolves towards partnerships (Cheon et al., 1995). Considering those characteristics it is assumed that IT has become a vital and competitive asset for the company thus making ITO more complex than other forms of outsourcing as IT is pervasive, affects and shapes most organizational processes nowadays (Kern and Willcocks, 2002). Following the changes in global economy and politics companies gained access to vendors in low wage countries. Companies do not longer have to rely on domestic vendors, though there is evidence that while outsourcing complicated processes the preferred option is a domestic vendor (Tomiura, 2009). This trend is also changing because of the technological advancements and the workforce in offshore locations posses’ competence to manage the emerging technologies (Djavanshir, 2005). Considering IT’s pervasiveness and influence on companies and the complexity of ITO, handing over the IT processes to a third party vendor is a venture filled with risks if not managed properly.

## 1.1 Background

Risks and risk mitigation in ITO initiatives have been studied extensively in the IT outsourcing literature. To address this issue, scholars have spent considerable time identifying risk factors. ITO risks according to Artunian (2006) frequently materialize in: feeble governance of a working relationship with the outsourcing vendor, overblown expectations, blindly banishing projects where the outsourcing partner is not able to manage the critical areas of company’s IT, dumbly disowning the projects where too much has been outsourced and the vendor knows as much as a company about its customers, bad assumptions about evolving technologies and businesses requirements, sloppy service levels and no transition plans when the outsourcing project has been terminated or abandoned. Such problems reduce the net benefits that a client organization reaps from the use of ITO. Studying the outsourcing ventures researchers used different perspectives to identify risks and provide risk management guidelines (Kumar, 2002). Those perspectives involved studying risks in ITO from different theoretical perspectives (Kern and Willcocks, 2002; Ellram et al., 2008), contracting and relationship perspectives (Kern et al., 2002; Willcocks et al., 2000; Willcocks and Lacity, 1999; Wulllenweber et al., 2008), software development projects, infrastructure management and application outsourcing (Nakatsu and Iacovou, 2009; Palmer and Lawler, 2005; Wan et al., 2008; Beulen et al., 2005) and the perspective of managing the already identified risks and front line evidence from outsourcing practitioners (Rottman and Lacity, 2006; Bendor-Samuel, 1997; Rottman and Lacity, 2008; Barthelemy and Geyer, 2005; Djavanshir, 2005; Willcocks et al., 2000; Kliem, 2004, Kumar et al., 2009; Company white papers). The above mentioned ITO studies that considered both the offshore and domestic contexts of ITO. Numerous risk frameworks were developed for both ITO contexts and different risk factor groupings were applied.

From these frameworks, it is obvious that the risk factors overlap in the two ITO contexts. Taken together, they define the wide diversity of risks that can serve as useful guidelines for managing ITO ventures. However, there are some limitations. Risks are based on anecdote and speculation, and often lack any validation (Nakatsu and Iacovou, 2009), nor are they ordered in importance and severity or compared with the other ITO context. A second limitation is that the frameworks tend to focus more on the offshore context of ITO omitting the domestic context.

These findings were utilized as a baseline for the empirical work with two contexts of ITO risks: domestic and offshore. At the outset, it was assumed that there would be some common risk factors across both contexts. At the same time, a prediction was made that there would be issues unique to each context of ITO. An important objective of this study is then to compare the offshore and domestic context of ITO and find out what risk factors were most severe in each context.

## **1.2 Problem area**

Outsourcing has evolved into a viable but risky management option to handle today's extensive IT assets (Kern et. al., 2002). The outsourcing environment has become immensely uncertain, information flows asymmetric between the outsourcing firm and the vendor and technology life cycles are getting shorter which have led to higher exposure to risks in outsourcing activities (Huai, 2008). As showed above nowadays the ramifications of IT outsourcing go well beyond the immediate price reduction. IT outsourcing has implications for day-to-day management and performance, as well as strategic implications for the company that is conducting outsourcing of its IT assets (Ellram et al., 2008). These strategic implications are considered with risks that the operation of IT outsourcing to a third party bears. Thus besides the short term influence, the firms competitive position on the market and situation is being affected in the long term (Ellram et al., 2008). The nature of the risks that the company has to cope with alters. IT outsourcing has become global which implies that the risks are also globalized (Goodman and Ramer, 2007). Vulnerabilities are multiplied as the lines of communication are lengthened and the number of people, organizations, computer networks that touch the data is augmented (Goodman and Ramer, 2007) which creates additional risks. While conducting IT offshore outsourcing a customer risks dwelling with foreign governments and other illicit players.

On the other hand IT services became a highly competitive marketplace which affects how suppliers bid and sign contracts (Kern et al., 2002) which creates additional risk for the customer. Selecting the right IT supplier is a costly operation in terms of time, effort and resources (Kern et. al, 2002). Suppliers themselves take a risk adhering that they can provide a greater range of services than they actually are capable of doing. This creates additional risk for the customer. Companies risk low quality work or massive delays in work because they are in the hands of outsource service providers (Diaconu, 2008).

It has been shown that all too many outsourcing initiatives have to be interrupted or even terminated in a premature stage (Wullenweber et al., 2008). Termination or interruptions are due to insufficient attention paid to risks at different stages of the outsourcing venture.

Although a lot of research has been done on managerial issues considering managing ITO initiatives, managing customer vendor relationships, contracting and outsourcing

software development projects, there is still limited research about the categorization and generalization of risks in domestic and offshore ITO context. Recent risk frameworks are mostly focused on one of the ITO contexts with tendency to focus more on the offshore context. It is obvious that the risks overlap in the two situations but taken mutually they demarcate the broad diversity in risk severity and differences in the offshore and domestic context of ITO.

To sum it up, the offshore ITO alternative is tempting but if improperly managed it might stymie companies from acquiring benefits. The case is that usually offshore ITO is not considered because of the prejudices and fears of misfortune related to risks with distant ITO suppliers. Then the decision made by the company is to conduct ITO domestically. On the other hand domestic ITO can result in the same

### **1.3 Purpose**

The main purpose of this research is to identify decision parameters when choosing between different IT Outsourcing alternatives. As mentioned above the ITO venture can be pursued domestically or offshore, the latter benefiting from cheaper labour costs. Conversely offshore ITO is usually associated with higher risk. Therefore decision makers involved in ITO initiatives are main addressees of this research. The decision makers can either be customers of ITO or IT suppliers interested in differences in perceptions about discussed risks in the two ITO contexts. Consecutively this research addresses future investigators in the ITO field and students interested in the ITO.

When reviewing the literature on ITO and Outsourcing risk a lack of comparisons between different risk types and ITO contexts was identified. The literature focuses on outsourcing contracting, ITO risk mitigation, managing IT projects, customer-supplier relationship analyses and offshore software development projects.

Therefore in this research we want to discover whether there are differences between the offshore and domestic context of ITO by comparing the severity of risks in domestic and offshore IT outsourcing and identify which risks are exacerbated in offshore IT outsourcing.

This thesis intends to provide a contribution to the general body of knowledge about outsourcing risk types and the differences between the offshore and domestic ITO. In addition a research is done considering the risk mitigation practices of companies. This contribution will hopefully help practitioners to gain more information about risk types, their severity, ways to mitigate them and highlight the crucial differences between the two ITO contexts based on risk comparisons. In addition findings should contribute to IT managers ability to scrutinize ITO initiatives and it is hoped that it will also guide future investigators in their research about risks.

### **1.4 Research Questions**

In order to address the problem above the following research question was formulated:

What is the difference between the domestic and offshore context of ITO based on the risk severity comparisons?

In order to answer the research question and provide a structure for the research following sub questions were asked:

1. What has been previously studied about risks and risk mitigation in IT outsourcing?
2. Which risks are exacerbated in the offshore IT outsourcing initiatives?
3. Which risks are equal in severity in domestic IT outsourcing and offshore IT outsourcing and which are significantly different?

### **1.5 Delimitation of thesis**

This thesis is limited only to companies in the Skåne region that either are engaged in domestic ITO initiatives or offshore ITO initiatives. Nevertheless some companies are making use of both domestic and offshore information technology outsourcing. This research will not focus on contracting or customer–supplier relationship analysis from a theoretical perspective. The focus will lie directly on comparing different risks severity identified in prior literature studies. Hence also the risk mitigation practices of companies will be exposed. The research will only include risks identified from ITO literature in the following categories: Software and Application Development, Infrastructure management and IT Consultancy. The reason to limiting the research only to risks identified in those three distinct categories is due to the fact that they encompass the main ITO activities and have been widely discussed in the ITO literature where numerous risk factors were identified.

The research will only focus on IT managers that follow ITO initiatives and thus gather empirical data from them. The research gathers some empirical information from the supplier side, although only their ITO experiences are being sought. This decision is taken as managers have a lot of knowledge and vast experience in managing ITO initiatives. As a result managers will provide empirical data that is required to answer the research questions. On the other hand the suppliers have a different point of view and face different risks which they approach in other ways. Furthermore suppliers could provide limited information. Many suppliers work towards one large customer, or by most for a few customers. The other reason for this limitation is also the distance to the suppliers as many are located in distant locations. Moreover selecting a supplier is already a risk for the customer thus interviewing the source of the risk would not shed any lights on how the risk is mitigated.

The interviews are conducted at five different large companies located in the Skåne region. Their business branches vary from IT consultancy to manufacturing. This wide scope of business types will add more differentiation in our research. On the other hand it is also a limitation as the managers can be influenced by the corporate culture and the company strategy, which might affect results of this study. Another delimitation stems from the fact that the interviewed companies are large and there might be differences in risk assessment and mitigation strategies when compared to small and medium companies. Due to those limitations the possibility to generalize from findings might be restrained.

## 2. Theoretical background

*In this chapter relevant literature along with relevant theoretical concepts to research purpose and questions are presented. This chapter begins with a literature review which shows state of the field and on what previous research has focused. After that the most important concepts within ITO are presented and the identified risk list for domestic ITO and offshore ITO is presented. Thereafter risk mitigation practices for identified risks are presented. The chapter concludes with a development of a conceptual framework for this study.*

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### 2.1 Literature Review

IT outsourcing is a broad field and has been studied widely in academic research. Nevertheless the existing literature revolves around a few key points. According to a recent study by Lacity et al. (2009) which reviewed the studies of ITO practice showed that ITO studies revolves around six distinct topics. One of those topics is the study of ITO risks. Lacity et al. (2009) shows that researchers were trying to answer two main questions relevant to ITO practices in the study of ITO risks. The questions asked were: what are the risks of ITO and how are ITO risks mitigated. Lacity et al. (2009) did not mention any studies that tried to compare the risks in offshore and domestic contexts of ITO or simply compare the two contexts in terms of risks. Most of the recognized studies provided lists of identified risks along with specific mitigation strategies. In order to get a deeper understanding of risks involved in ITO and to be able to compare the offshore and domestic context the authors of this thesis further analyzed studies of ITO risks.

It has been found that risks in ITO have been studied from different theoretical and practical perspectives. Using the theoretical perspectives, researchers explore the field, nature of risks and develop an understanding of how firms manage the risks of offshore or domestic ITO ventures. While using the practical perspectives researchers provide guidelines and evidence from practitioners within the field. Other approaches include comparing risk factors in the two different contexts of ITO and analyzing the risks and mitigation from a specific “project” point of view, for example outsourced software development projects. Although the perspectives can be discriminated some researchers combine them in order to develop a deeper understanding of ITO risks.

Huai, 2008 studied the mitigation of ITO risks from a theoretical point of view of agency theory and cooperative game theory. Huai (2008) developed a relational contract model. However the study assumed that main risks stem from vendors. Ellram et al., 2008 studied risks of offshore outsourcing of professional services utilizing the transaction cost economies (TCE). The main contribution is the finding that companies will not offshore outsource in areas of high unmanageable risk. The study takes also a look into managing relationships, expanding on themes provided by TCE. Kern and Willcocks (2000) studied IT outsourcing relationships from theoretical perspectives of organization theory, social exchange theory and relational contract theory. The study developed a conceptual model for understanding the relationship regarding risks. Juras (2007) analyzed the total cost of outsourcing using a risk approach. The study categorized risks in strategic, operational, compliance and financial types. As a result a matrix considering risk occurrence and risk impact was constructed.

From a practical perspective Kern et al. (2002) investigated the relationship between the customer and the supplier. The research focused on supplier selection process and

was based on a single case and analyzed the customer supplier relation from the outsourcing contract's perspective. Willcocks et al. (2000) conducted an extensive single case study on one large domestic IT outsourcing initiative in the UK Defence Sector. Risks were analyzed from the contract signing and supplier selection criterion process. The contribution of this research is an extended risk factor list and a mutual dependence and influence between contract signing and relationship development that was found. Willcocks et al. (2000) showed that good relationships do not substitute for poor contracting. Djavanshir (2005) surveyed the risks of IT offshore outsourcing and compared them against the benefits of IT offshore outsourcing. The study was based on a questionnaire where respondents were asked to rate risks and benefits importance. Djavanshir (2005) showed that IT offshore outsourcing will create more jobs domestically and that the most important risks compared to benefits were: political, legal, information vulnerability, immature business environment and socio-cultural issues. According to the risk type practical advices about mitigating risk were provided. Willcocks and Lacity (1999) studied IT outsourcing risks in a single case study of a European insurance company called Polaris. The study analyzed the 10 risk factors distilled from prior studies. The risks were analyzed against the strategy of Polaris. The contribution lies within contractual and managerial choices of handling risks. Wullenweber et al. (2008) surveyed IS business process outsourcing initiatives. The study aimed at analyzing the interplay of outsourcing risks and relationship elements. The survey showed that relationship processes are most important for mitigation risks.

Palmer and Lawler (2005) studied offshore outsourcing from the software development perspective. The study analyzed usage of software development methods in offshore projects with high emphasis on offshore outsourcing risks. The researchers utilized four risk factors and showed how effective companies are in handling those risks. Findings suggested that most companies were not effective in handling offshore outsourcing risks. Wan et al. (2008) studied risks in outsourcing software developing projects. The research identified several risk factors: contract risks, requirements definition and change, lack of communication, political and legal environment differences and exchange rate fluctuations. A risk model was presented. The risks were only analyzed in the offshore context of outsourcing; no comparisons were made to domestic outsourcing of software development. Wan et al. (2008) provided advices to managing such activities. Beulen et al. (2005) investigated the risks involved in offshore infrastructure management and application outsourcing by utilizing previously identified risk factors in offshore outsourcing. They stated that the nature of risks for the infrastructure management was different than for application outsourcing and provided six different strategies for managing risks in offshore outsourcing of infrastructure management.

Only a limited amount of literature was found that partially investigated the differences between risks in domestic IT outsourcing and offshore IT outsourcing. Nakatsu and Iacovou (2009) studied important risk factors in outsourced software development projects. The purpose was to generalize a list of risks in domestic and offshore outsourcing situations and compare those two contexts in order to see how the risk factor changes, which ones are exacerbated in respective category and which are unique to the offshore context. Nakatsu and Iacovou (2009) identified the risks from IT project management literature. They found that traditional project management risks were important in both situations but the offshore context was more vulnerable to some traditional risks (for example: lack of top management support) as

well some factors were unique to it (for example: language barriers). On the other hand Rottman and Lacity (2008) studied handing over IT projects from domestic suppliers over to offshore suppliers at a US-based biotechnology company. Interviews were conducted with managers. The findings suggested that the whole operation was risky because of socio-cultural differences and project management issues. Furthermore because of those risks the cost of managing IT projects rose and diminished the benefits of cheap labour.

Most of the literature focused on companies based in the USA, England and scarce evidence about other European companies was found. Barthelemy and Geyer (2001) conducted a study that compared IT outsourcing initiatives in France and Germany. The focus of the study lied in explaining differences between German and French IT outsourcing practices through cultural and economical differences. Two main dimensions of IT outsourcing are compared: the IT outsourcing decision and the management of IT outsourcing operations. The study touches risk area in describing why the companies from those countries are not eager to conduct IT outsourcing.

In order to visualize the results of literature review a table (table 2.1) is provided with the different perspectives and corresponding literature references.

**Table 2.1** Review of current research in ITO

Perspective		Literature reference
Theoretical		Kumar (2002) Ellram et al. (2008) Kern and Willcocks (2002) Diaconu (2008) Ghodeswar and Vaidyanathan (2008) Kumar et al. (2008) Juras (2007) Huai (2008)
Practical	Contracting	Kern and Willcocks (2002) Willcocks and Lacity (1999)
	Customer – Vendor Relationship	Kern et al. (2002) Huai (2008) Willcocks et al. (1999) Kern and Willcocks (2002) Wullenweber et al. (2008) Bergkvist (2008a)
	Risk Mitigation guidelines and practices Outsourcing practices	Rottman and Lacity (2006) Deloitte (2008) Artunian (2006) Bendor-Samuel (1997) Fitzgerald (2005) Barthelemy and Geyer (2001) Rottman and Lacity (2008) Barthelemy and Geyer (2005) Djavanshir (2005) Goodman and Remer (2007) Willcocks et al. (2004) Willcocks and Lacity (1999) Kliem (2004) Tomiura (2008) Juras (2007) Hoecht and Trott (2005), CapGemini (2009)
Application Outsourcing and Infrastructure Management		Beulen et al. (2005)
Software development projects		Wan et al. (2008) Kliem (2004) Palmer and Lawler (2005) Nakatsu and Iacovou (2009)
Risk comparisons		Nakatsu and Iacovou (2009) Rottman and Lacity (2008)

## 2.2 Outsourcing

Outsourcing has come a long way from the days when the focus was given to processes like maintenance of professional sites and networks of computers and supplies. Today outsourcing is considered a common phenomenon where large companies and organizations outsource their entire departments or even the majority of their functions to an external provider.

Historically the main reason to outsource was cost savings (Juras, 2007). Nowadays it is more likely for companies to outsource mainly for strategic reasons. Such reasons could encompass the need for immediate penetration of the market, access to skills and resources that are unavailable and to reduce the scale of some tasks in order to give more power to the management of tasks that are superior.

In addition a lot of definitions for the word “outsourcing” can be found in many scientific papers and literature. In each one of them the author uses a similar approach in order to define the term “outsourcing”. What differentiates though each definition is the author’s effort to adapt it to the perspective that suits the needs of his/her research. A lexical analysis of the term outsourcing shows that it is an abbreviation for “outside resource using” (Yin and Wang, 2008). Moreover according to Lei and Hitt (1995) outsourcing refers to “the reliance on external sources for manufacturing components and other value-adding activities”. Outsourcing can also be seen under the perspective of a contract which is conducted for transferring some of organization’s recurring internal activities and decision rights to outside providers (Ghodeswar and Vaidyanathan, 2008). In another manner it may involve transferring ownership of an organization’s business activities to an outside provider (Juras, 2007). A more simple and to the point definition refers to outsourcing as the “make-or-buy” decision, where decisions are to be made considering what to perform internally versus what to “buy” in the marketplace as long as business has existed (Ellram et al., 2008). Williamson (2008) defines the make-or-buy decision as a basic transaction paradigm which can also be seen as the canonical transaction for transaction cost economics (TCE). Putting the term “outsourcing” under that perspective someone could imply that it extends from sourcing out the management of a business’s cafeteria to sourcing out an entire business process. The make-or-buy term for outsourcing fits more the needs of this thesis and its research purpose as it encompasses a wider field of outsourcing implementations.

In addition a medium for conducting an effective outsourcing initiative are Service Level Agreements (SLA). SLAs are in a manner contracts where the service provider agrees to execute the outsourcing process at cost lower than what the host organization is currently incurring and agree to accept a service target in excess of what the host organization is achieving (Ghodeswar and Vaidyanathan, 2008).

For purposes of this research different types of outsourcing are identified, considering the “where” question when sourcing out a process; thus there are:

1. *Offshore outsourcing* where the process or asset of an organization is outsourced to a third party supplier located on a different continent. An offshore outsourcing example is when an organization in Sweden contracts a company in India to develop and support a process for them.
2. *Nearshore outsourcing* where the process or asset of an organization is outsourced to a third party supplier located in the same continent and to neighbouring countries. To make it more clear, nearshore outsourcing can be seen when a Danish company outsources a process to a Norwegian or Swedish vendor.
3. *In-house outsourcing* where the process or asset of an organization is outsourced to department that serves under the same organization. At this

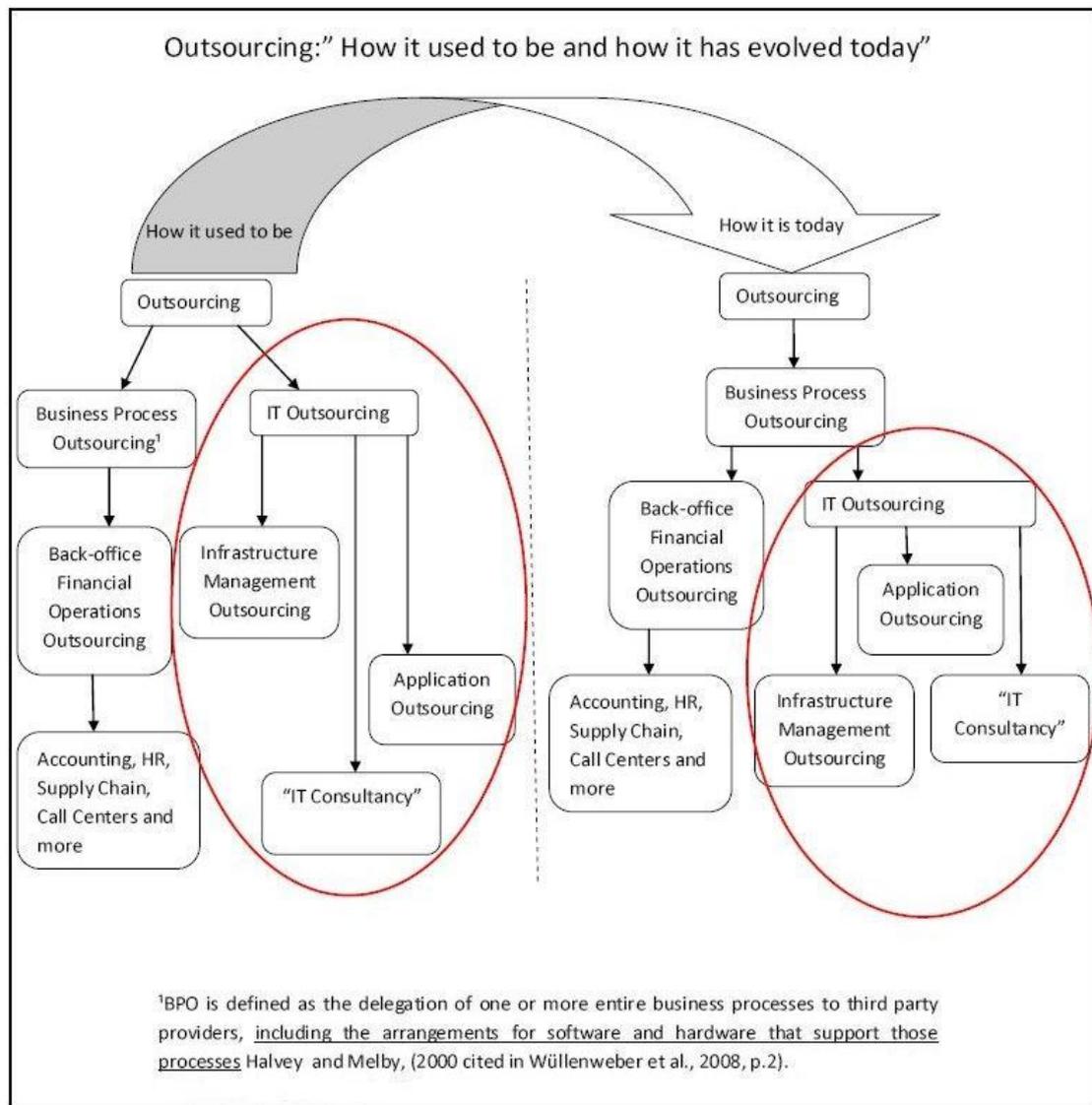
point the process stays in the organization whether a new department is built for this reason or it is simply assigned to an existing department.

4. *Inshore or domestic outsourcing* where the process or asset of an organization is outsourced to a third party supplier located in the same country as the client. For example Company A, which is based in Malmö in Sweden, outsources a manufacturing process to a company that resides in Göteborg in Sweden.

The outsourcing types that are going to be further analyzed and compared in this research are: offshore and inshore or domestic outsourcing. The decision to further analyze and compare offshore and domestic outsourcing is based on this study's limitations as it is limited to companies in the Skåne region where the prevailing form of ITO initiatives is domestic or offshore. Furthermore the majority of the literature focuses on those two ITO forms and the issues involved in ITO are overlapping in both forms whilst being unique to one of the forms.

Moreover outsourcing has a wide field of application and it affects but also is affected by people, technology and business therefore making it an interesting research area for both business and academia. Because of the aforementioned characteristics outsourcing is a process that is tolerable to changes and is continuously evolving in order to fit the everyday-updated business needs. In addition The main change which affected the writing of this thesis is that outsourcing processes like information technology or manufacturing, that used to be separated from core business functions, are now starting to be aligned with these main business activities and thus making them fall under the same outsourcing initiative which emanates from the business itself. It means that IT Outsourcing has evolved and is being categorized as one of the business processes of a particular company. This "evolution" of outsourcing is better described with the schema below (see figure 2.1) where the focus is given to IT outsourcing as it is the main research area of this thesis work.

**Figure 2.1 – The evolution of Outsourcing**



### 2.3 IT outsourcing

The line of inquiry in order to clarify what is meant with the term “IT outsourcing” follows the traditional definition of outsourcing, which was given earlier, but with more focus given to IT assets and processes. To make it more clear traditional IT outsourcing is also defined as the make-or-buy-decision that an organization takes to contract-out or sell some or all of its IT assets, people or activities to a third party vendor, who in exchange provides and manages these assets and services for an agreed fee over an agreed time period (Willcocks et al., 1999).

Nowadays IT outsourcing is considered as a process that covers the full lifecycle of transition, maintenance and transformation for applications and processes specific to the needs of the business (CapGemini Application Outsourcing for Manufacturing Companies, 2009). Also the trend today is to move to a more strategic point of view of IT outsourcing where companies have short-term relationships with multiple partners (also called multisourcing) and do not follow traditional large-scale long-term single provider relationships (Hoecht and Trott, 2006). Moreover IT is not a

homogeneous function, but comprises a variety of IT activities (Kern and Willcocks, 2002). Therefore to define it clearly, when IT is considered there are three main processes, services or activities that can be outsourced:

- Software and applications development,
- Infrastructure management and
- Consultancy services

These three categories cover to a great extent the outsourcing processes of IT as it is today and thus will be considered for this research.

#### *Software and application development outsourcing*

When discussing software and application development outsourcing someone can refer to developing a new or updating an old business software through a third party provider. According to Candan et al. (2009) these third party services can act as data stores as well as entire software suites for improved availability and system scalability, thereby reducing businesses' burden of managing complex infrastructures. This provisioning is called information/application outsourcing or Software as a Service (SaaS). Making it clear, application outsourcing as a subcategory of IT outsourcing, is the process of delivering, developing, managing, deploying, maintaining, licensing and providing support of business software by an external supplier (LeClerc, 2003). It also encompasses the area of Application Service Providers (ASPs), as such services are considered as mediums for outsourcing IT functions and applications.

#### *Infrastructure management*

On the other hand Infrastructure management outsourcing although it can be enhanced via application outsourcing, it should be considered itself as an ITO venture. According to Beulen et al. (2005) the term "infrastructure management" can be defined as preventative and remedial services that physically repair or optimize computing and communications hardware. When such services are placed to an external provider for transition, maintenance and transformation then we can consider infrastructure management as an outsourcing process. An example of outsourced infrastructure management processes includes, remote management of computers and networks and integrating and centralizing systems. It also includes infrastructure that deals with the following types of work: help desk, servers, end-user devices, mainframes and storage (Pandit and Srinivasaraghavan, 2009).

#### *IT consultancy*

When arguing about IT consultancy one can refer to such a term as the advisory services that help business clients assess different technology strategies; these services are contracted in order to provide knowledge, consultation and guidelines in issues and matters that will affect IT assets and processes of the business. IT consultancy is indeed considered an IT outsourcing process as the business itself outsources its already existing IT functions to an external consultant in order to improve them and make them more profitable. In addition what should be stressed at this point is that IT consultancy can be viewed under an outsourcing perspective only when the agreement-contract is signed for a rather long period (at least 1-year contract).

## 2.4 Offshore IT outsourcing

Offshore IT outsourcing is one of the many outcomes of globalization (Kliem, 2004). Because of this several authors tend to put it under the term of “global sourcing” (Goodman and Ramer, 2007). The fact that country borders are gradually being erased while the world is “shrinking” even more and also the fact that telecoms have advanced vastly throughout the last two decades are all elements that added a whole new perspective to the offshore ITO process. This new perspective was and is one of the main reasons why businesses today are shifting from on-shore domestic ITO projects to offshore ones. Furthermore the “offshore outsourcing” term can be found in literature under the abbreviation L.C.C.S which stands for “Low Cost Country Sourcing”. According to Fitzgerald (2005) the three main reasons to consider a L.C.C.S initiative are: pricing, globalization and supply chain competition; these three demands are in line with the shift towards offshore ITO.

Moving on to what is offshore IT outsourcing, a recent definition according to Bergkvist, (2008a) considers offshore IT outsourcing as the special case of IT offshoring when the supplier is an unaffiliated firm. Another definition considers it as the outsourcing of information technology work to a 3<sup>rd</sup> party supplier located on a different continent than the client (Rottman and Lacity, 2008). Both definitions follow the same concept as ITO but with focusing on the processes that are outsourced to a different country from that of the client or briefly sending the process off-shore. What should be made clear at this point is the fact that the provider is unaffiliated with the customer.

For the purposes of this research offshore IT outsourcing is studied under the perspective that includes sending work to countries outside of Sweden and more specifically the Skåne region. Thus the term “nearshore outsourcing” which considers sending work to neighbouring countries (like Denmark or Norway) is covered by the aforementioned and more generic term of offshore outsourcing and will not be considered while conducting this research.

## 2.5 Domestic or On-shore IT outsourcing

In domestic/On-shore IT outsourcing the process remains strictly inside the borders of the country that the client is located or has its headquarters. A recent and relative to the purpose of this thesis work definition found in scientific literature considers “domestic outsourcing” as the process of outsourcing to a supplier located in the same country as the client (Rottman and Lacity, 2008).

Moreover the first outsourcing ventures where placed inside one country were both the customer and supplier were located. During those years the notion of placing an IT process “outside”, was restricted to country borders.

## 2.6 Risk in IT Outsourcing

There are numerous definitions of the word “risk” and it may be theorized from different perspectives. In general by risk we mean:

*“the possibility of bringing about misfortune or loss”*

Collins Dictionary of English Language (1987).

According to Kliem (2004) risk is realized as an event which results from vulnerability or exposure, that becomes a reality by having an impact on cost,

schedule, quality or people. Also, risk is considered as a negative outcome which derives from the uncertainty about future development and has a known or estimated probability of occurrence based on experience or some theory (Willcocks and Lacity, 1999; Wüllenweber, et al. 2008). Thus, in the current study, the authors of this thesis will understand the notion of risk as the possibility of bringing misfortune or loss because of the underlying uncertainties that are hidden in ITO operations.

As IT outsourcing is considered a major and critical business plan, it therefore carries risks because of the uncertainty of the future.

When an organization or a company decides upon following an ITO initiative there is a certain amount of risk that must be considered before and while following such a venture. This stems from the fact that a lot of companies have failed to succeed to materialize the expected benefits of ITO by not taking seriously into account the risks that can appear while doing so. Thus risks can be considered as key determining factors in the success or failure of an outsourcing initiative (Schofield, 2008). Also due to current environment where technology and market are gradually shifting, the risks in ITO are at the same time shifting too. This means that while the market is becoming more complex and while technology advances even more, risks in outsourcing ventures follow the same direction, they become more complex and thus need more attention than before.

The fact stated above also declares that most customer companies today seem to be more reliable on contractor support when it comes to adopting an IT outsourcing initiative and thus according to Schofield (2008) all risks associated with outsourcing should be carefully considered.

In addition when discussing risks in ITO, risks that concern “make or buy” decisions of an organization’s IT service should be taken into account. On one hand when considering the “make” decision which deals with what can be handled internally in the organization, we can simply look at risks that occur in any common or complex IT project. These risks include specification uncertainty, incorrect understanding of specifications, overlooked specifications, unrealistic schedules and budgets, shortfalls in externally furnished components or services, real-time performance shortfalls, and technical uncertainty due to innovative nature of the project (Kumar, 2002). On the other hand when considering the “buy” decision, that’s when outsourcing comes in place and thus risks that are assessed at this point are differentiated from the ones mentioned above. For the purpose of this thesis the focus will not be put on the general term of IT outsourcing, as this term is rather wide and by analyzing such risks, the comparative purpose of this research will not be fulfilled. Thus this research of risks in IT outsourcing is limited to analyzing the risks that can be found and occur in both domestic and offshore IT outsourcing.

As stated previously to outsource or not to outsource an IT function is indeed an important decision which hides risks and therefore needs to be handled carefully. These hidden risks will be analysed and categorized further on in this chapter.

Moving on, after making clear the decision to outsource an IT process, the business has to decide upon the right outsourcing path; for the purpose of this research two paths are considered, the domestic and the offshore ones. In both paths the initial risks are inherited but each path incorporates its own risks and at the same time dismisses some of the initial ones. For example a risk concerning the legal system about IT

initiatives in a foreign country will be incorporated only if the company decides to follow an offshore inquiry. Thus a different list of risks is created depending on the outsourcing path that is followed. After that decision has been made clear and is indeed aligned with the business strategy, the business has to decide upon the most satisfying provider that fits its needs best. This is a critical phase because wrong selection can compromise the whole outsourcing initiative (Juras, 2007). Willcocks et al. (1999) give a thorough and extensive analysis on the vendor selection process when outsourcing IT and among others they focus on three main competencies when choosing a supplier: delivery, transformation and relationship competency (Logica The CEO Guide To Selecting Effective Suppliers, 2007). In addition the vendor selection process should be consistent with the client's specifications. These specifications can include for example certain legal requirements. Also at this point after taking seriously into account the severity of a bad decision when selecting an effective supplier, another form of outsourcing within the primary outsourcing can rise; the one of consulting, where the business puts in state its IT needs to people that have experience and consulting knowledge in IT outsourcing ventures. Thus choosing the right provider may lead to the mitigation of some of the initial risks but not for all of them. This also means that a different supplier selection may lead to different risks; thus when the supplier has been chosen a certain number of risk factors have been chosen too.

After identifying and analyzing the risks and dealing with them the business has to align the possible outcome of these risks with its business strategy. If this is feasible then a risk mitigation process begins; by succeeding or failing to mitigate the risks the business respectively decides to continue or not with contracting the selected vendor. It is important to state here that an amount of risks remains even after the mitigation process. Also after contracting the selected supplier new risks may appear concerning mostly operational situations between the vendor and the contractor. For example the productivity of the vendor's personnel may decline during the process, resulting into a new risk that the client hadn't considered till then.

On the next page we provide a simple diagram (see figure 2.2) in order to show when- that means at what time during the ITO venture- misfortune or loss (risk) for a client company can arise while they are conducting an ITO operation. It is important to state at this point that the "casual" meaning of the term risk may change in every step that it appears as it is depended on the concept that created it. For example risks that are produced from the decision to outsource IT are indeed different in nature from the risks that appear after contracting the selected vendor. Nevertheless the overall concept of the term risk which speaks of the possibility of bringing about misfortune or loss is applicable in each step.

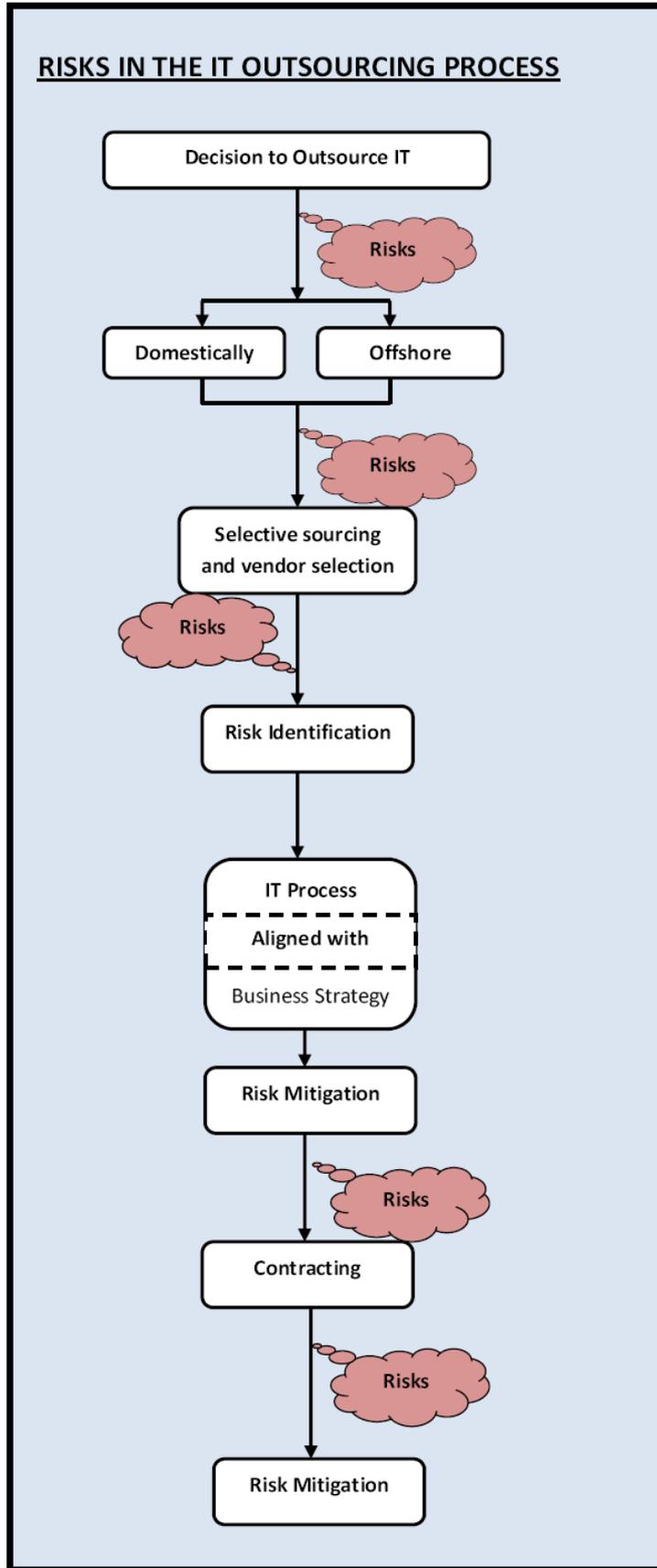


Figure 2.2 – Risks in the IT Outsourcing Proces

Furthermore, in effort to define and better describe the risks that can emerge in IT outsourcing, they were sorted into five representative categories. The sorting was influenced by the Enterprise Risk Management framework (Juras, 2007) and by a risk framework proposed by Kliem (2004). Thus five representative categories of risks were identified:

1. *Geopolitical* - Risks that stem from geographical and political situations; to make it more clear this category encompasses risks that can be created from geographical disbursement (Palmer and Lawler, 2005) and risks that deal with situations like war, terrorism or internal armed conflicts and in general with the stability of a region (Beulen et al., 2005). Also risks that stem from governmental laws and regulations fall in this category.
2. *Economical* - Risks that stem from economical and financial situations; also risks that point out the reliability of the customers financial statements and reports (Juras, 2007) and in general risks that affect budget and costs (Kliem, 2004).
3. *Strategic* - Risks that stem from strategic situations. Here the focus is placed on the risks that are aligned with the customers concerns about achieving its overall mission and goals (Juras, 2007) and maintaining long term relationship with supplier. Managerial risks that deal with decision making (Kliem, 2004) fall in this category. Also this category encompasses risks that are produced by outsourcing IT core competences<sup>1</sup>.
4. *Operational* - Risks that stem from operational situations. Such situations concern the customer's use of people, processes and assets (Juras, 2007). The technological asset that is mentioned by Juras (2007) is considered according to the authors of this thesis a whole category by its own and thus would be analyzed respectively. Risks considering reporting issues (Kliem, 2004) fall also under this category.
5. *Technological* - Risks that stem from technological situations. This category is about risks that deal with tools, techniques and standards (Kliem, 2004). This category also encompasses telecommunications and data and security infrastructure.

Those five representative risk categories incorporate risk factors which describe the issues involved in every ITO venture.

### **2.7.1 Risks in domestic IT outsourcing and risks in offshore IT outsourcing**

Risks that were taken into account, before conducting this research, were firstly realized in both categories. The discrimination came afterwards, while reading literature that concerned both offshore and domestic IT outsourcing initiatives.

Accordingly, the line of inquiry that was considered was consistent with the purpose and questions of this research:

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<sup>1</sup>“Core competencies can be viewed as the pool of experience, knowledge and systems, etc. that exist elsewhere in the same cooperation which can be deployed to reduce cost or time required either to create a new , strategic asset or expand the stock of an existing one.” (Markides and Williamson,1994)

- risks that appear both in offshore and domestic contexts
- risks that appear in both contexts but are exacerbated in the offshore context and
- risks that are unique to the offshore context.

Hence differences were identified in all five risk categories in the two different outsourcing contexts. Research purpose was influenced from a previous study which also considered differences between the domestic and offshore context of ITO but in outsourcing software development projects in domestic and offshore context (Nakatsu and Iacovou, 2009). A description of the five categories and the risks they incorporate follows.

First of all as far as the geopolitical category is concerned the risks in offshore IT outsourcing are far more stressed than the ones in domestic. This can be explained simply because domestically the same laws, language, policy and culture apply; while outsourcing offshore these advantages does not exist. Nevertheless some risks, like the risk of not considering a specific legislation while contracting, are also considered domestically but are not as exacerbated as in offshore projects (see table 2.2).

**Table 2.2** Geopolitical risks in offshore and domestic ITO

<b>Geopolitical risks</b>	
<b>Offshore</b>	<b>Domestic</b>
<ol style="list-style-type: none"> <li>1. Geographical Distance (Ellram et al., 2007)</li> <li>2. Cultural (Wan et al., 2008)</li> <li>3. Language barriers (Olsztynski, 2005)</li> <li>4. Worker union opposition (Ellram et al., 2007)</li> <li>5. Governmental (Djavanshir, 2005)</li> <li>6. Legal protection (Ellram et al., 2007)</li> <li>7. Technological advancement of the country(Olsztynski, 2005)</li> <li>8. Legal (law) regulations (Djavanshir, 2005)</li> <li>9. Rigid custom laws (Wan et al., 2008)</li> <li>10. Regulations that discourage foreign business (Kliem, 2004)</li> <li>11. Standardization (Kliem, 2004)</li> <li>12. Visa laws (Djavanshir, 2005)</li> <li>13. Industrial spies (Goodman and Ramer, 2007)</li> <li>14. Hostile nation (Goodman and Ramer, 2007)</li> <li>15. Terrorism (Goodman and Ramer, 2007)</li> </ol>	<ol style="list-style-type: none"> <li>1. Location (Willcocks and Lacity, 1999)</li> <li>2. Worker union opposition (Ellram et al., 2007)</li> <li>3. Legal (law) regulations (Djavanshir, 2005)</li> <li>4. Legal protection (Ellram et al., 2007)</li> <li>5. Industrial spies (Goodman and Ramer, 2007)</li> </ol>

Furthermore the same notion follows on the economical category where problems concerning currency fluctuations, high exchange rates and high tariffs on import and export seem to exist only when contracting an external partner offshore (see table 2.3).

**Table 2.3** Economical risks in offshore and domestic ITO.

<b>Economical risks</b>	
<b>Offshore</b>	<b>Domestic</b>
1. Opportunistic behaviour of IT supplier (Ellram et al., 2007) 2. Vendor becomes a competitor (Ellram et al., 2007) 3. Inflation (Kliem, 2004) 4. Currency fluctuations – unstable currency (Kliem, 2004) 5. Economic Crisis (Fersht, 2009) 6. High exchange rates (Kliem, 2004) 7. High tariffs on import and export (Kliem, 2004)	1. Economic Crisis (Fersht, 2009) 2. Opportunistic behaviour of IT supplier (Willcocks and Lacity, 1999) 3. Vendor becomes a competitor (Ellram et al., 2007) 4. Inflation (Kliem, 2004)

Going to the strategic category we can see that more or less the risks are the same in both categories (see table 2.4). At this point it would be wise to stress out that despite the fact that the customer’s strategy to outsource IT domestically may be different than when outsourcing offshore, the risks in both circumstances do not change. What is considered is that only some “host” countries have more volatile markets than the customer’s “home” country; fact that influences the customer’s business strategy when contracting an offshore partner and thus creates extra risk.

**Table 2.4** Strategic risks in offshore and domestic ITO.

<b>Strategic risks</b>	
<b>Offshore</b>	<b>Domestic</b>
1. Transfer of knowledge to supplier (Rottman and Lacity, 2006) 2. Loosing of knowledge (Rottman and Lacity, 2006) 3. Market volatility (Elleram et al., 2008) 4. Lack of understanding of customer Need (Willcocks and Lacity, 1999) 5. Maturity, experience and expertise levels of supplier (Willcocks et al., 2004) 6. Under-delivery(work completion time) (Diaconu, 2005;Rottman and Lacity, 2008) 7. Expectations (Willcocks and Lacity, 1999; Willcocks et al., 1999) 8. Different strategies (Deloitte, 2008) 9. Incomplete contracting (Willcocks and Lacity, 1999) 10. Power asymmetries between supplier and client (Willcocks and Lacity, 1999) 11. Loss of control over internally generated IT (Willcocks and Lacity, 1999) 12. Relationship between supplier and contractor (Wullenweber et al., 2008; Willcocks et al., 1999; Kern et al., 2002)	1. Under-delivery(work completion time) (Diaconu, 2005;Rottman and Lacity, 2008) 2. Transfer of knowledge to supplier (Rottman and Lacity, 2006) 3. Loosing of knowledge (Rottman and Lacity, 2006) 4. Incomplete contracting (Willcocks and Lacity, 1999) 5. Expectations (Willcocks and Lacity, 1999; Willcocks et al., 1999) 6. Different strategies (Deloitte, 2008) 7. Lack of understanding of customer need (Willcocks and Lacity, 1999) 8. Loss of control over internally generated IT (Willcocks and Lacity, 1999) 9. Maturity, experience and expertise levels of supplier (Willcocks et al., 2004) 10. Power asymmetries between supplier and client (Willcocks and Lacity, 1999) 11. Relationship between supplier and contractor (Wullenweber et al., 2008; Willcocks et al., 1999; Kern et al., 2002)

Moreover, risks in offshore projects introduce many of the same complexities to operational processes as outsourcing domestically does (Kumar et al., 2009). Nevertheless, four additional risks are added concerning the quality of the employees

(see table 2.5); this is expected as more operational issues can easily emerge when employees from different cultures have different communication codes and also may react differently in critical situations.

**Table 2.5** Operational risks in offshore and domestic ITO.

<b>Operational</b>	
<b>Offshore</b>	<b>Domestic</b>
1. Relationship between supplier and contractor (Wullenweber et al., 2008; Willcocks et al., 1999; Kern et al., 2002)	1. Relationship between supplier and contractor (Wullenweber et al., 2008; Willcocks et al., 1999; Kern et al., 2002)
2. Control of process (Juras, 2007)	2. Control of process (Juras, 2007)
3. Incidence response capability (Goodman and Ramer, 2007)	3. Personnel opposition against outsourcing (Barthelemy and Geyer, 2001)
4. Dependency (Diaconu, 2005; Willcocks et al., 1999)	4. Client support (Kliem, 2004)
5. Incomplete specifications (Elleram et al., 2008)	5. After service (post implementation) (Wan, et al., 2008)
6. Inability to measure performance (Elleram et al., 2008)	6. Inability to measure performance (Elleram et al., 2008)
7. Quality of personnel and work (Juras, 2007; Rottman and Lacity, 2008)	7. Incomplete specifications (Elleram et al., 2008)
8. Security and information vulnerability (Goodman and Ramer, 2007)	8. Dependency (Diaconu, 2005; Willcocks et al., 1999)
9. Personnel opposition against outsourcing (Barthelemy and Geyer, 2001)	9. Security and information vulnerability (Goodman and Ramer, 2007)
10. Productivity of personnel declines (Huber, 1993)	10. Productivity of personnel declines (Huber, 1993)
11. After service (post implementation) (Wan, et al., 2008)	11. Incidence response capability (Goodman and Ramer, 2007)
12. Human resources availability (Wan et al., 2008)	12. Mobilization
13. Client support (Kliem, 2004)	13. Quality of personnel and work (Juras, 2007; Rottman and Lacity, 2008)
14. Personnel security (Goodman and Ramer, 2007)	14. Hackers (Goodman and Ramer, 2007)
15. Personnel background check (Goodman and Ramer, 2007)	
16. Rogue employees (Goodman and Ramer, 2007)	
17. Hackers (Goodman and Ramer, 2007)	

Finally, the technological category incorporates the same risks in both contexts. Traditionally companies were negative with outsourcing IT assets that required top-line technology, to offshore destinations. Nowadays this notion has been altered, as the intellectual capital of advanced countries has gradually been incorporated by these low-cost offshore destinations (Bodarress and Ansari, 2007). Thus technological risks in ITO initiatives (which can be seen on table 2.6) have been equally shared in both contexts.

**Table 2.6** Technological risks in offshore and domestic ITO.

<b>Technological risks</b>	
<b>Offshore</b>	<b>Domestic</b>
1. Loss of developing methods (security of code) (Goodman and Ramer, 2007)	1. Loss of developing methods (security of code) (Goodman and Ramer, 2007)
2. Data confidentiality and security (Kumar, 2002)	2. Data confidentiality and security (Kumar, 2002)
3. Network complexity (Goodman and Ramer, 2007)	3. Network complexity (Goodman and Ramer, 2007)
4. Loss of control over authentication and network perimeters (Goodman and Ramer, 2007)	4. Loss of control over authentication and network perimeters (Goodman and Ramer, 2007)
5. Technical change (short technology life cycles) (Kumar, 2002)	5. Technical change (short technology life cycles) (Kumar, 2002)

All in all an ITO venture can be therefore considered a risky process in both domestic and offshore contexts. Thus the mitigation of such risks can become really important for companies that have decided to follow an ITO initiative.

## 2.8 Risk Mitigation

As mentioned previously, IT outsourcing can hide a great deal of risk. The question that eventually comes next is how those risk can be managed and their impact reduced. It has to be stated that the term “risk mitigation” may also be found in outsourcing literature under the term “risk management”. These two terms are affiliated, as risk mitigation follows the same objective as risk management which is to reduce the level of risk exposure of a given business venture (Huai, 2008). Moreover, according to Tho (2005) the activity of being able to mitigate risk in IT outsourcing is a fundamental component of the process itself in order to ensure predictable outcomes for the ITO initiative while also being able to derive maximum benefits from the ITO initiative itself. Commonly risk mitigation in IT outsourcing can be achieved through different and numerous ways which are dependent on the type of risk that needs to be mitigated. In addition most relevant literature focuses on risk mitigation in offshore ITO initiatives which is rather rational due to the fact that risks in offshore projects are more exacerbated than in domestic projects. Willcocks et al. (1999) point out that a general approach to achieve risk mitigation in IT outsourcing projects considers the necessity to retain in-house capabilities and the development and sustainability of client-vendor relations. In order to adapt risk mitigation theories to the scope of this thesis it will be analyzed how representative risks in the five aforementioned risk categories can be managed and reduced in both offshore and domestic contexts.

As far as domestic IT outsourcing is concerned most risks that stem from geopolitical situations can be tackled with smart and to the point contracting and with the use of legal (law) consultation from experts. Willcocks and Lacity (1999) with their *Polaris* case study - an innovative IT outsourcing project conducted domestically in the UK – gave a lot of emphasis in the role of the contract for dealing with geopolitical issues like law regulations and legal protection and concluded that such risks can be mitigated with detailed relevant contract terms and with further contract facilitation and contract monitoring. Moving on to offshore geopolitical risks more mitigation theories can be found. Risks that stem from rigid custom laws and regulations that discourage foreign business can be mitigated by checking the maturity of the business

environment of the supplier candidate's country and by choosing an offshore destination that is business friendly and has supportive government laws and regulations (Djavanshir, 2005). Cultural issues and risks that stem from governmental situations according to Kliem (2004) can be dealt on a preventive phase by training people on quality requirements like language skills and conflict management. Also studying the foreign country's socio-cultural values, norms and beliefs or even by visiting beforehand the candidate's country can assist the mitigation process for such risks (Djavanshir, 2005). The issue of the geographical distance between the contractor and the supplier can be dealt by using on-site engagement managers (OEMs). According to Rottman and Lacity (2006) use of OEMs in such situations reduces geographical distances while on the same time it ensures the successful integration between contractor and supplier. Lastly risks like: visa laws, hostile nation, industrial spies and technological advancement of the country can be mitigated through thorough country risk analysis and with due diligence accordingly (Goodman and Ramer, 2007). Through such risk mitigation processes the political state of the vendor's country and the vendor's relationships with competitive companies or possible industrial spies should be analyzed.

In addition when choosing a domestic supplier, risks that fall in the economical, category follow similar mitigation methodology as in the offshore projects. Risks like: vendor becomes a competitor and opportunistic behaviour of IT supplier have a common mitigation solution which applies both in domestic and offshore projects. This general solution considers relationship attributes between the outsourcer and the supplier and can be also applicable in the operational and strategic category for mitigating relevant risks. Some believe that the relationship dimension can be regarded as the main element in keeping a contract alive and in general a key point in the entire risk mitigation process (Wüllenweber et al., 2008). In addition, many theories can be found in scientific and non scientific literature that support ways in how to build a profitable and efficient relationship between contractor and supplier. Among them, the "managing in a recession" approach from Cullen and Willcocks (2003) which considers relationship attributes under a power-based and partnering-based approach (Logica, Outsourcing in difficult times: Releasing cost but maintaining control) and the "eight essential factors for strategic alliances" (Lacity and Willcocks, 1998) are good examples for mitigating the aforementioned economical risks. Moving on to economical risks like: currency fluctuations and high tariffs on import and export such risks can be prevented or at least minimized by finding public policies that support an open-market economy without high tax and tariff burdens (Djavanshir,2005). Also another way to mitigate such risks is as mentioned before by using OEMs into the staffing models and ratios; by doing so the contractor can smoothen the transition either offshore or domestically (Rottman and Lacity, 2006).

Further on, risks that stem from strategic problems are more or less the same in both domestic and offshore projects and thus their mitigation follows the same norms. Ellram et al. (2008) provide in their research how certain firms adapted and mitigated strategic risks like: market volatility, incomplete contracting and lack of understanding on customer need. In addition risks that stem from knowledge transfer and loss can be mitigated through several ways. One effective and efficient way to achieve knowledge transfer during the IT outsourcing process is through standardized service provisioning (Beulen et al., 2005). For example knowledge implementation risks like writing operations manuals for the service delivery can be mitigated through

such standardized service level agreements. Furthermore, another way to protect significant IT knowledge while outsourcing, which is also called intellectual property, is by selecting several unaffiliated suppliers to outsource (multi-sourcing) and thus distribute the knowledge so as no supplier can assemble the puzzle (knowledge) on its own (Rottman and Lacity, 2006). Nevertheless, this method may add more operational risks to the whole process as the higher the number of the suppliers the harder the control over them. On the same time despite the fact that multi-sourcing may add such risks, there are ways in order to mitigate them and nullify them (CapGemini, The keys to successful multi-sourcing). Thus by taking that path the business has to make a rather critical decision. On the other hand risks produced from the loss of control over internally generated IT can be mitigated through two different but also effective ways. One way is to continually inspect and retain the tacit knowledge of the activity by collocating in-house employees with the provider as supervisors (Ellram et al., 2008; Rottman and Lacity, 2006). The other way which was also referred previously, is through building trusting and cooperative relationships with the vendor (Ellram et al., 2007). Moreover, strategic risks like: lack of understanding of customer need, under-delivery, power asymmetries between supplier and client and maturity, experience and expertise levels of supplier can be mitigated by fully understanding the vendors business and vice versa and by also monitoring continuously the suppliers performance. Relationship attributes are also of vital concern when dealing with strategic risks. Good and edifying communication between client and vendor is the first step in achieving a well defined strategy in an IT outsourcing project. Good communication stems from a trustworthy and understanding relationship. A conceptual model for understanding the relationship attributes is provided by Kern and Willcocks (2000).

Next mitigating operational risks, like the ones that appear when productivity of personnel declines and ones that deal with personnel and work quality, follow the same process in both domestic and offshore IT outsourcing ventures. From a domestic IT outsourcing example such risks were overcome by defining in depth business intentions to in-house employees and at the same time by keeping the entire process under confidentiality until a detailed and thorough plan could be presented to the employees (Huber, 1993). In addition risks like: Security and information vulnerability, incidence response capability and personnel security can be mitigated by using avant-garde secure R&D (Research and Development) facilities for dealing with sensitive data access and updates; demanding unique security areas from the part of the supplier and by implementing “clean desk” policies which control what documents or computer screens can be viewed (Rottman and Lacity, 2006). Lastly as in the economical and strategic category same follows here; risks like: dependency, after service post implementation, personnel background check and relationship between supplier and contractor are all risks that can be partly mitigated through building a mutual closer relationship that operates within the “spirit of the contract”. Efficient customer-supplier relationships that support the operation of an IT outsourcing venture may occur during the transition of the entire process. Lacity and Willcocks (2000), point out eight areas occurring in the transaction phase, which if tackled properly may lead to operational success; these areas concern:

- Interpreting the contract
- Establishing post contract management infrastructure and process

- Implementing, consolidation, rationalization and standardization
- Validating baseline service scope, costs, levels and responsibilities
- Managing additional service requests beyond baseline
- Fostering realistic expectations of supplier performance
- Publicly promoting the IT contract

Lastly a common way in mitigating technological risks like: data confidentiality and security and loss of developing methods (security of code), especially in offshore projects, can be achieved by coordinating security issues through system scanning, security metric reporting, incidence response and business continuity and disaster recovery management (Goodman and Rammer, 2007). In addition, technological risks stemming from network problems and complexity can be mitigated when contracting the supplier by requiring dedicated communication facilities (Beulen et al., 2005). Also co-operating with reliable local partners, in order to solve technical problems that cannot be solved remotely or are so critical that there is no time for the client's technical crew to fly in, can be consider a rational way to mitigate such risks (Beulen et al., 2005).

## **2.9 Conceptual framework**

Based on our literature review we created a conceptual framework which consists of the aforementioned identified risks and the severity of those risks in both offshore and domestic contexts of IT outsourcing (see figure 2.3). This framework represents the focus area of this thesis. The framework is a basic conceptual structure used to solve or address complex issues. The framework has a conceptual form as the description of the different risk factors in two ITO contexts was based on the literature and research about risk factors. In order to rank the severity of risks and use the conceptual framework for attaining the research's purpose three levels of risk severity were introduced to the framework: limited, moderate and strong. The severity rankings of the risks will be shown after the empirical data has been gathered and analysed.

**Figure 2.4** – Framework of the severity of risks in both outsourcing contexts

		CONTEXTS OF IT OUTSOURCED SERVICES			
		◆...◆ =DOMESTIC	OFFSHORE= ●—●		
		LIMITED	MODERATE	STRONG	
RISK CATEGORIES IN IT OUTSOURCING	GEOPOLITICAL	RISKS			
	ECONOMICAL	RISKS			
	STRATEGIC	RISKS			
	OPERATIONAL	RISKS			
	TECHNOLOGICAL	RISKS			

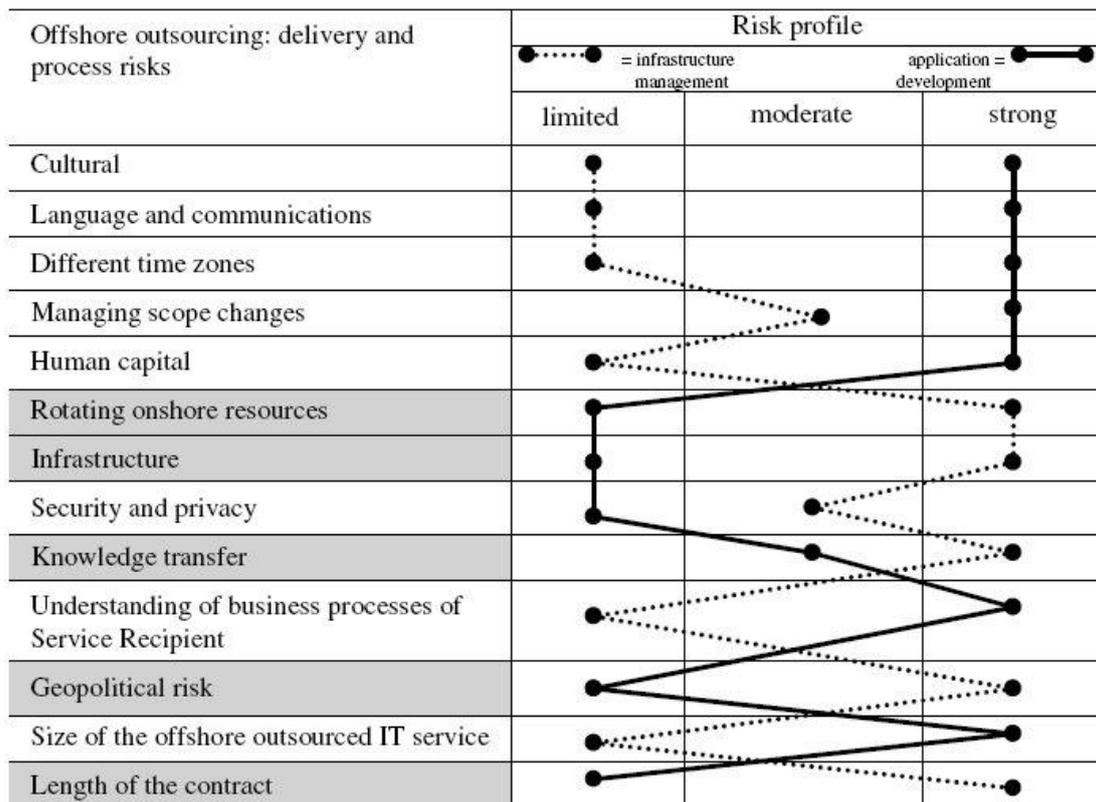
**SEVERITY OF RISKS IN BOTH  
CONTEXTS**

The above framework will be followed further on when describing risks in both offshore and domestic IT outsourcing. The dotted lining with the rhomb indicates the domestic context and the solid lining with the circle indicates the offshore context.

This framework was inspired by the risk impact framework provided by Beulen et al. (2005) (see figure 2.4). Beulen et al. (2005) focused on the risk impact in offshore infrastructure management outsourcing and application development outsourcing, and therefore provided a comparative framework analyzing the severity of risks in both IT outsourcing services. Both infrastructure management and application development outsourcing shared different risks in the offshore content. In addition the risk categories were constructed to fit the comparative study between infrastructure management and application outsourcing. The offshore outsourcing risks were then

realized under three categories (limited, moderate and strong) so as to provide a more descriptive comparison of the results. This framework assisted Beulen et al. (2005) to conclude in a revised theory for their study, leaning more towards to outsourcing of infrastructure management.

**Figure 2.4** – Framework of risk profiles of Application Development (line) and Infrastructure Management (dotted line) in Offshore Outsourcing Relationships (Beulen et al., 2005).



Based on literature review we modified the framework of Beulen et al. (2005) in order to share, categorize and compare the identified risks in both contexts (offshore and domestic) while having in mind the three proposed ITO services (application & software development, infrastructure management, IT consultancy). The severity levels (limited, moderate and strong) were assimilated so as to better analyse and describe the empirical findings of the research and thus to conclude in better comparisons. It has to be made clear that the proposed framework will provide comparative results between risks in offshore and domestic ITO contexts. These results can be afterwards realized and viewed among the three main ITO services.

## 2.10 Summary and contribution of Chapter 2

In chapter 2 the underlying theoretical foundation of this research was presented. Firstly a literature review was conducted which showed what and how has been investigated in the field of IT Outsourcing. Gaps in the body of current knowledge were identified and traced back to the research's purpose and questions. Basing on literature review important notions and concepts in the ITO were presented. Further a list of identified risks was developed and presented. Following the risk list, the risk

mitigation strategies were presented based on the literature. As a result of above mentioned steps a conceptual framework (section 2.9) of this study was developed.

### **3. Research approach**

*In this chapter the methodological approach of this study is presented. First the process of choosing a relevant method is highlighted. The choice of method was done according to the purpose and research questions and available body of knowledge. After that the research process is presented. The work process was iterative however theoretical, empirical and analytical phases could be distinguished.*

---

#### **3.1 Method choice**

In this research, a collection of research methods was applied to fulfill the main purpose of the study. The adopted methodology includes literature review, qualitative interviews and questionnaires.

Authors of this thesis wanted to gain access to the experiences of the practitioners and receive rich detailed descriptions of the studied phenomena. Data obtained from qualitative interviews are sources of well-grounded rich descriptions of the study's phenomena (Miles and Huberman, 1994). Fruitful descriptions can be derived from qualitative data that allow to generate or revise conceptual frameworks. Qualitative data is mostly represented by words which organized into stories or other utterances have a concrete, vivid meaning that proves more convincing to the reader than summarized numbers of quantitative studies (Miles and Huberman, 1994).

In order to gather the required data and attain research's purpose five qualitative interviews were conducted. In addition to every interview situation a questionnaire about risks was handed out to the interview person prior to the actual interview. This was done in order to attain method triangulation. Method triangulation is the use of two or more data generation methods to corroborate findings and enhance their validity (Oates, 2006; Yin, 2003). Using two data sources allowed to question data gathered from one of them thus giving the possibility to evaluate the data and create more consistency across empirical data. According to Oates (2006) interviews are appropriate data gathering methods when researchers want to obtain detailed and rich information about the context, ask complex questions, explore emotions and stances toward the researched issue which cannot be described by questionnaire. The conducted interviews were so called expert interviews where the interviewees were representatives of the elite that work within the field of research (Kvale, 1996).

The criteria for choosing experts were set on the basis of guidelines provided by Kvale (1996) for expert interviews and interview content provided by Oates (2006) and Kvale (1996). The researchers wanted to get rich and detailed descriptions of the study's field and meet expert practitioners. Thus, the interviewed person:

- should have at least five years experience in IT business;
- worked or is currently working with managing outsourcing ventures;
- should possess an understanding of the risk issues;
- should be employed at managing positions at respective companies.

Interviews had a semi-structured form which allowed a flexible interview process. Semi-structured interviews allow the researcher to wander among the list of themes that has to be covered in the interview depending on the conversation flow (Oates, 2006). This equals the metaphor of the traveller used by Kvale (1996) where the

researcher is wandering through the landscapes of the interviewee's knowledge. In that way the interviewees are able to speak more freely and with more detail about the issues the researcher arise and at the same time introduce issues of their own stemming from their experiences (Oates, 2006). This gave as a broader picture of how risk is assessed an managed and categorized by practitioners. Data gathered in this way is hard or even impossible to quantify which further legitimizes the use of a qualitative data gathering methods.

### **3.1.1 Questionnaire**

According to Oates (2006) questionnaires are pre defined sets of questions put into a specific order. They are widely used in research when a researcher wants to collect data from many people. Questionnaires are well suited when researcher wants to obtain brief and uncontroversial information from people, acquire standardized data and expect that respondents are able to understand questions and provide answers. Questions should be brief and they must be relevant to the overall purpose of the research (Oates, 2006). The questionnaire used in this study asked the respondents to rank the severity of risks in offshore IT outsourcing and domestic IT outsourcing in five different risks categories: geopolitical, economical, strategic, operational and technological. Respondents ranked the severity by providing the risks listed in ascending order. Risks and their respective categories were juxtaposed during the theoretical phase of the research work.

These questionnaires were sent out to interview persons along with a list of interview questions prior the interview in order to give them information about research and what aspects it covered. It gave the interviewees also the possibility to get ready for the interview and provide additional input stemming from their experiences. Oates (2006) pointed out that with a questionnaire the researcher often do not get the chance to get back to the respondent and ask additional questions of relevance, therefore questionnaires should be carefully designed. In this research the questionnaires are a backbone to the interviews and at the same time provide guidelines to categorize the results of interviews. The questionnaire can be found in Appendix B and results with rankings from every interviewee are presented in Appendix C.

### **3.1.2 Interview persons and companies**

The selection of interview persons followed the criteria provided in section 3.1. Yin (2003) and Kvale (1996) suggests that interview persons should be directly related to the field of research and at best be active practitioners in the field. Finding adequate interview persons was made obtaining contact with different companies in the Skåne region. At first a general list of companies was generated that possess large IT departments and some of them are known to be in collaboration with Lund University. It was assumed that the companies make use of IT outsourcing initiatives as their business profiles were large. Initially a list of 20 companies was compiled and e-mails explaining our study and its purpose were sent to the student contact persons or contact persons at respective company. In one case the interview was organized through a personal contact with the interviewee. It resulted with positive responses from five companies. Further contact was taken with the actual person that was supposed to be interviewed. Their competence and expertise was verified and according to our criteria provided in section 2.1 they were considered experts. The interviewed persons worked at:

*IT Companies:*

- Logica in Malmö is an IT and business services company. As a firm, Logica, stands out for providing business consulting, systems integration and IT, and business process outsourcing services;

*Manufacturing companies:*

- Accenture in Copenhagen, Denmark, a global management consulting, technology services and outsourcing company;

- E-ON in Malmö is one of the world's largest investor-owned power and gas companies. In the Nordic market E-ON has produced and delivered energy in the form of electricity, gas, heating, cooling, waste treatment and energy related services to approximately one million customers;

- Trelleborg AB in Trelleborg, a global industrial group with cutting-edge expertise in advanced polymer technology. Moreover Trelleborg AB as a global engineering group it has a lot of experience in the field of offshoring as it has its own plants in several different countries throughout the world;

- Alfa Laval in Lund offer solutions for optimized processes to its clients. The main focus areas of Alfa Laval's operations include: energy, environment conservation, food and water supplies and pharmaceuticals.

All the interviews took place at the respective company site and varied between half an hour and one and a half hour. Interviews were conducted between April and June 2009.

### **3.2 Research process**

According to Oates (2006) research process begins with personal experiences and motivations of researchers and refined by literature review. The authors of this thesis possessed personal motivations to investigate IT outsourcing and risk mitigation as they want to be future practitioners in the field. The research process of this thesis can be described as iterative work process (Backman, 2008). By that is meant that during the course of work the authors went back, renewed the knowledge, rewrote and updated information when investigating the field deeper. Although the research process was characterized by an iterative work process some phases in the work were distinguished. The research process is divided into: theoretical phase, empirical phase and analytical phase (Backman, 2008). Despite this division into phases no ending and beginning point to a specific phase could be distinguished. The phases overlapped with each other and were in constant interaction. This is due to the fact that whenever new information was discovered it transformed the current manner of work. Backman (2008) refers to this situation also as self correcting process.

#### **3.2.1 Theoretical phase**

In order to achieve this research's purpose and be able to conduct interviews information about the field had to be structured up. Thus theoretical phase was characterized by a systematic literature review. Literature review's purpose is to find the literature that covers the field of study and as a next step critically evaluate previous work that has been done and look for themes that link different work together (Oates, 2006). To do that authors used ELIN (Lunds university article

database) and accessed Lunds university library through the LOVISA tool and in person. A number of articles were found of relevance but conducting further critical review about half of them were rejected as not useful for building up the knowledge structure of this research. The authors rejected articles due to the fact that they did not match their criteria. The criteria set by authors where: the article has to focus on risks in IT outsourcing initiatives, the article has to analyze an outsourcing venture and the article has to focus on risk identification and mitigation in IT outsourcing ventures. In searching the databases keywords of this thesis were used. Textbooks were used as introductory sources of information (Oates, 2006). Scientific books were used to attain accurate understanding of the field showing which research methods have been used, from which perspectives the field was investigated and provided basic foundations for this research.

Non academic references were also used in this study. Authors used white papers from different companies that are active practitioners in the field of outsourcing. White papers that were used were from Logica, Deloitte and CapGemini. For example *The Risk Intelligent Approach to Outsourcing and Offshoring* (Deloitte, 2008) was used to get more insight into how practitioners use methodologies in their daily work. The interview participants confirmed the fact that companies provide their own guidelines for treating risks which stems from years of experience in the business.

The literature review made it possible to create a deeper understanding about the state of research in the field of risks in IT outsourcing and provide additional information for the research. Researchers were able to construct a risk list which was based on the findings from literature and at best represented the issues in IT outsourcing field. The developed risk list was used in the questionnaire. Besides expert interviews require from researcher a thorough and deep understanding of the study's field and this was attained through literature review. Moreover literature review revealed shortages in the body of knowledge about IT outsourcing initiatives and canalized author's attention towards under investigated areas. This led to development of a conceptual framework which represented the focus area of this thesis and the risks inherent to them. A framework is basic conceptual structure used to solve or address complex issues and a logical structure for classifying and organizing complex information. In this study the framework had the conceptual form as the explanation was based on the literature, research about risks and the fact that literature did not contain any particular theory that explained the differences between the risks in two different contexts. For developing the framework researchers used the risk list and categorized them in five distinct categories and divided them in two different contexts. In order to rank the severity of the risks and use the conceptual framework for attaining the research's purpose three levels of risk severity were introduced to the framework: limited, moderate and strong. By doing so the researchers were able to explain the studied relation between risks.

### **3.2.2 Empirical phase**

In the empirical phase data was collected through five interviews. The conducted interviews were of semi-structured form. A interview guide was developed. According do Kvale (1996) an interview guide in semi structured interviews is an outline of topics which will be covered together with suggested questions. The interview guide was divided into three groups which served different purposes during the duration of the interview. In total 26 questions were distributed among three

categories. The interview questions are presented in table 3.1 and the whole interview guide is presented in Appendix A.

The first group, Background questions consisted of four questions that addressed the interviewee more personally and were used to create a profile of the interviewee. Background questions were also used as warm up questions (Kvale, 1996; Oates, 2006) in order to acquire personal contact with the interviewee before going over to the research area.

Second group Preliminary inquiries about IT outsourcing consisted of eight questions and served the purpose of getting more information about the different experiences the interview person had during his career with IT outsourcing initiatives. At the same time experiences and practices stemming from the current position of the interviewee were asked. At the same time the second group of questions was directly related to area and purpose of the research. The last question in this group is put there on purpose to introduce the interviewee to the specific risk questions and to make the interviewee reflect upon what was already said.

Third group Risk specific questions represent the core of this study. Using questions in the third category research's purpose has been reached. Firstly a general point of view regarding risks is asked and what at first glance appears for the interviewee to be a risk in IT outsourcing initiatives. Thereafter the interviewee is asked according to the questionnaire which has been sent prior to interview and using the sequential questions in the third category.

As the interviews were of semi structured form the questions were not asked in the order that is provided in table 3.1. The interviews had a discussion form which wandered between second and third group of questions after receiving basic information about the interviewees using the first group of questions, as they represented the goal of this research.

**Table 3.1** Interview questions

<b>Background questions</b>
<ol style="list-style-type: none"> <li>1. What is your educational background?</li> <li>2. How long have you been working with IT and IT outsourcing?</li> <li>3. What is your current position at the company?</li> <li>4. What are your general experiences about IT outsourcing initiatives?</li> </ol>
<b>Preliminary inquiries about IT outsourcing</b>
<ol style="list-style-type: none"> <li>1. How important is the outsourcing unit of the company?</li> <li>2. Are the company's cost saving the main driver of outsourcing initiatives?</li> <li>3. Why did your company decide to outsource its IT assets? ( Reasons and decision criteria for outsourcing)</li> <li>4. Which part of the IT department did you outsource? (application and software development, infrastructure management, consulting or something else..?)</li> <li>5. How did you select your vendor? Did you follow a certain selection process? (vendor selection criteria and process)</li> <li>6. Do you outsource in-shore (domestic), offshore or both? Define why you chose this specific type of outsourcing.</li> <li>7. Do you consider outsourcing a risky process?</li> </ol>

### **Risk Specific Questions**

1. What do you consider as a risk in IT outsourcing?
2. Which category of risks do you consider most important (provided the category list) at a first glance?
3. Do you see any differences considering risks in domestic IT outsourcing and offshore IT outsourcing?
4. How do you mitigate those risks?
5. Can you describe any incident that occurred that can be identified as a risky situation while outsourcing IT assets?
6. Can you describe any incident that can be a result of a certain category of risks?
7. How important are the outsourcing initiatives for the operation of the company?
8. Has your company developed any risk mitigation guidelines?
9. Is there a form that you use when contracting suppliers? Some specific rules that you follow?
10. Do you consider economic crisis a major threat for outsourcing?
11. Is the relationship between you and the supplier a critical success factor for outsourcing and mitigating risk? Explain why...
12. Is this relationship the main concern in IT outsourcing initiative?
13. Do you intent to sign heavily specified Service Level Agreements?
14. Are you aware of the "winners curse"?( if the interviewee does not know what it is we will explain)
15. According to you what is the general way to mitigate risk?

### **3.2.2.1 Interviewing**

As mentioned above the interviewees were contacted through e-mail and an appointment was agreed. The initial information about the duration of the interview and the content of the interview was given in the e-mail. Once the researchers met the respective interviewee the information about research and its purpose was repeated and the possibility to audio record the interviews was asked. All interviewees agreed to record the interviews. Interviewees were told about the possibility to withdraw from the study at any time if they felt it was not what they expected and direct way could harm them. After the interview completed questionnaires about risks were obtained from the participants. Participants were asked if they could provide any additional feedback about the questionnaires. Some participants added additional risk factors which changed the risk list and broadened our perspective.

All interviews were conducted face to face at meeting rooms at the respective companies. Interviews were audio recorded which allowed the results to be transcribed and thus be prepared for the analytical phase (Kvale, 1996). Transcripts of all interviews are presented in Appendix D.

The consent to publish company names and participants name was asked. Four of the interview persons provided the consent. One of the participants did not agree that the name would be published although consent to provide company name was obtained. This situation created concern for the confidentiality of the research which implies that private data about subjects won't be disclosed (Kvale, 1996). In order to guarantee this participant's anonymity participant's name is not disclosed. In that way no information that could identify this participant was disclosed.

### **3.2.2.2 Ethics**

While conducting social research it is important for researchers to follow certain ethical guidelines (Kvale, 1996) as the conduct of the research should be ethical (Israel, 2006). Ethical codes possess on definition but must be evaluated and interpreted in every research situation differently (Kvale, 1996). Two ethical guidelines are of relevance for this study: informed consent and confidentiality.

Informed consent is the practice of informing subjects about the overall purpose of the investigation and how it is planned, as well as of any possible risks and benefits from the participation in the research (Kvale, 1996). The benefits and risks should be presented from perspectives they have for the particular individual and for the overall society (Israel, 2006; Kvale, 1996). Further, informed consent implies that the research subjects have the right to withdraw from the research at any time if they feel it is not what they expected and their participation is fully voluntarily time (Israel, 2006). Informed consent was obtained from every participant.

Confidentiality entails that private data that could lead to disclosure of subjects identities will not be reported (Kvale, 1996). Confidentiality means the right of the research subject to remain anonymous and at the same is the situation when information obtained from interviewees will be only used in particular way (Israel, 1996). Confidentiality is to protect privacy of the subjects and can be obtained by changing names of participants (Kvale, 1996). If the researcher wants to use information obtained from participants and which may be confidential consent must be given from the participants. One of study's participant wanted to remain anonymous and as described above, confidentiality was maintained in this situation.

### **3.2.3 Analytical phase**

The analytical phase of this research consists of presentation of the results and their analysis in three categories of outsourced IT services: Software Development and Application outsourcing, Infrastructure management and IT Consultancy. The categories used are developed in the second chapter of the thesis and are a part of the conceptual framework of this study. It is recommended that the results from the research and their analysis are presented in two separate chapters (Backman, 2008). In the case of this thesis the decision was made to present the data and discuss it separately. The results are presented in the fourth chapter. The results chapter indicate that the thesis is in its final part (Backman, 2008). The results presented in this chapter have direct linkage to the research purpose and questions which is aligned with the reasoning presented in Backman (2008). The presentation of results is free from conclusions and inferences. The provided description is neutral and objective as much as it was possible (Backman, 2008) nevertheless unavoidable comments about results are made to help the reader understand the presentation. In the next chapter (chapter 5) the analysis of the results is conducted along with discussions. Analysis of the empirical findings is done according to the context of theories obtained from the literature (Backman, 2008). In this part the researchers made inferences and draw conclusions from previously presented results.

The rationale for presenting results and analyses in two distinct parts stems from the fact that data presented in that way is easier to read and understand for the reader. Albeit deciding upon such structure some repetitions in the presented information may occur.

The first step of analytical phase began with gathering the results of the questionnaires and summing up the results. In situations where new information about risks were entered, notices have been made. The results of questionnaires are presented together with comments made by respondents. Also changes to the risk list were presented and summarized in tables 4.1 – 4.5. The questionnaires as stated above were used to check the interviewee but at the same time provided a straightforward answer to research's questions. The results of questionnaires mirrored the findings from the interviewing. Albeit the questionnaires were not that many in amount so the study is supplemented by interviews.

The second step involved transcribing the audio recordings of interviews. Both of the authors listened first through the recordings and reported places where they had problems in understanding because of the quality of the recording. After doing that, the transcribing began. Every transcript was checked twice by both researchers in order not to misunderstand something that could create bias in our empirical findings. All interviews were analyzed following guidelines for qualitative data analysis provided by Oates (2006). The transcripts were printed on equal sheets of paper and were quickly skimmed through by both researchers. After doing that the exact analysis of the transcripts began. Both researchers read each transcript and provided comments. This was the same procedure as for the transcribing, so to obey any misunderstandings. The empirical findings were categorized into three distinct segments (Oates, 2006): segments that have no relation to the overall research purpose, segments that provide general descriptive information which can be used to create company and participants profiles and segments that appear to be relevant to research questions. Following segmentation the empirical findings that were relevant for this research were categorized into five risk categories: Geopolitical, Economical, Strategic, Operational, Technological. This sort of categorization is known as a deductive approach (Oates, 2006). The categories were derived straight from theories discussed in the theoretical part of this research. Findings in each category were put into a theoretical context. Finally the results from questionnaires and interviews were presented in figure 1 along with risks severity.

The decision to present findings and analyze them in two separate chapters enhanced the discussion. Besides in the analytical phase account is given for the surprising results of the study. In the discussion part findings were analyzed in literature's context. Findings within each outsourcing situation were discussed providing valuable insights for the study result. Following the discussions and analysis in the Conclusions chapter research questions were answered.

### **3.3 Research Quality**

Quality of qualitative research may be measured through concepts of: Reliability, Validity and Generalizability (Creswell, 2007; Seale, 1999). Those are presented below and explained how they were addressed in this research.

#### **3.3.1 Reliability**

Reliability refers to situation when a researcher later on would use the same procedures to conduct his/her study as the earlier investigator in the same field and obtained same findings and conclusions (Yin, 2003; Seale, 1999). Considering interviews reliability is attained through careful preparation of interviews and accurate transcriptions of the interviews (Kvale, 1996). This study is possible to replicate but if

conducted at another time and place it would generate different results, therefore the context of this study and underlying theories are explained as clearly as possible.

### **3.3.2 Generalizability**

Generalizability pertains to possibility to generalize from science and provide some universal laws that explain different behaviours, issues and situations (Kvale, 1996). Although for this research important is the analytical generalization were the findings from one study can be transferred on to another situation explaining what might have occurred (Kvale, 1996; Seale, 1999). Analytical generalizations can be made from interviews but the researcher has to specify the supporting evidence and make research's arguments explicit. It also relies on the quality of the interviews. This is also the reason why research's purpose and context was explained thoroughly. It is assumed that some generalizations can be made out of the study's results.

### **3.3.3 Validity**

Validity affects the two beforehand mentioned measures of research quality. Validity refers to if research findings are actual and accurate (Creswell, 2007). Research has to focus on temporary phenomenon and adequate measurements must be used to address those phenomenons (Yin, 2003; Kvale, 1996). The use of improper research methods may bias the results of the study and undermine study's results. The purpose of this research was to gain more insights into field of IT outsourcing risk severity, mitigation and differences between the domestic and offshore contexts of ITO. The aim was to gain more deep understanding of issues addressed in the research and compare risks in two distinct categories. Therefore the use of interviews and questionnaires as data gathering methods is applicable. The gathered data must reflect the measured situations (Yin, 2003). Even though using the correct data gathering methods the validity might have been restricted by:

- semi structured forms of interviews could bias interviewers;
- researchers own perspectives and preconceptions about field of research as well the literature created a specific perspective of the field;
- interviewees actual positions at the companies as it changes their experiences;
- the fact that one person requested to remain anonymous;
- information that was asked about was considered sensible.

Validity of this research is enhanced by:

- companies and participants chosen for interviews possessed the requested criteria and were active practitioners within outsourcing field with a lot of experience;
- all the participants provided consent for the interviews;
- the transcripts were reviewed by participants prior the analysis was done;
- interviews were conducted at companies which was the familiar environment for the participants;
- appropriate methods for data collection were used;

- method triangulation was used. The questionnaire was provided and answered by all participants so the results were strengthened and validated;
- outsourcing and risk management are issues of high importance for companies in times of current economical downturn.

### **3.4 Summary and contribution of chapter 3**

In this chapter the research approach of this study was presented. The chapter started with a discussion about choice of a appropriate data gathering and analysis method. The decision was made to conduct a qualitative study using interviews and a questionnaire. Based on the chosen method the ethics of the study were discussed as people were involved. The decision was legitimated and in the next step the research process was discussed. The research process was described as an iterative work process but three distinct phases were distinguished: theoretical phase, empirical phase and analytical phase. Then the phases were discussed and it was showed how researchers worked during each stage. The chapter ended with discussion about credibility of this research considering the notions of reliability, generalizability and validity.

## 4. Results

*Here the results of questionnaires and interviews are presented. Results are presented as objectively as possible and no conclusions are being made. The chapter starts with presentation of the risk severities in the offshore and domestic contexts of IT in their respective categories. The risks are summarized into a table for every category. Next the interview results are presented. The interview results are presented beginning with the presentation of companies and interviewee's profiles. The results are then grouped and presented in the framework developed in chapter 2.*

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### 4.1 Results from questionnaires

As mentioned in the method part the questionnaire asked the respondents to rank the severity of risks in offshore IT outsourcing and domestic IT outsourcing in five different risks categories: geopolitical, economical, strategic, operational and technological. Doing that allowed to show which risks were most important in each category. In some cases risks could be grouped according to their severity creating a bulk of risks which are most severe in the respective context. Some of the risks were ranked the same in severity across different questionnaires and at the same time they had been awarded a lower or higher severity ranking in other questionnaire. Results for the rankings will be presented separately for each category both in the offshore and domestic contexts. A revised table of risks with severity rankings is presented for each risk category.

The order of risks was computed according to the rankings provided by interviewees. Interviewees were asked to rank risks in ascending order where the first risk was most severe and the last one least severe. The rankings for every risk provided by every interviewee were summed up and the final risk ranking was constructed. It was constructed by comparing the ranking sums for every risk and the lower the accumulated sum of every risk ranking was the more severe it was considered. The order equals the number of risks in each category. See appendix C for the details of computation. In some cases the risks were grouped as the differences between the accumulated risk ratings were not significant.

#### 4.1.1 Geopolitical risks

From the results two specific risk groups in the offshore context of ITO can be created as the accumulated sum for risk ratings are divergent. The first group consists of the following risk factors: Geographical Distance, Language barriers, Cultural, Worker union opposition, Governmental and Legal protection. Listed according to their severity from most severe to the least severe. Those six risks were ranked as most important in the offshore context across questionnaires as their accumulated risk rating sums were close to each other. The first group provides the risks that the IT manager has to work with on an everyday basis and that should be taken into account while an outsourcing venture is being planned. The second group of risks consists of the remaining risks: Technological advancement of the country, Legal (law) regulations, Rigid custom laws, Regulations that discourage foreign business, Standardization, Visa laws, Industrial Spies, Hostile nation, Terrorism. The second group of risks presents risks which if applicable to any country the probability of conducting any offshore IT outsourcing initiative is highly impossible. The managers though should be aware of those risks and take them into consideration.

In the domestic IT outsourcing context the most severe risk mentioned almost by all of the respondents was the issue of Location. It is similar to the offshore context as where the Geographical distance had vast impact. The second risk marked as severe was the risk of Worker union opposition. This was ranked as second by all the respondents.

To sum up it was shown that the most important issue in both context was the risk of Location. Risk of different culture, language barriers, governmental issues, and technological advancement of the country were unique to the offshore context. On the other hand the risk connected to Legal Protection which was identified in both context was exacerbated in the offshore context, as most respondents did not see an issue with that within the domestic context.

**Table 4.1** Results from questionnaire for the Geopolitical category of risks

<b>Geopolitical risks</b>	
<b>Offshore</b>	<b>Domestic</b>
1. Geographical Distance 2. Cultural 3. Language barriers 4. Worker union opposition 5. Governmental 6. Legal protection	1. Location 2. Worker union opposition 3. Legal (law) regulations 4. Legal protection 5. Industrial spies
7. Technological advancement of the country 8. Legal (law) regulations 9. Rigid custom laws 10. Regulations that discourage foreign business 11. Standardization 12. Visa laws 13. Industrial spies 14. Hostile nation 15. Terrorism	

#### **4.1.2 Economical risks**

In the Economical risks category, in the offshore context of IT outsourcing the most severe risks was identified as Opportunistic behaviour of the IT supplier followed by the risk of Vendor becoming a competitor. The next on the risk list were: Inflation, Currency fluctuations, Economic crisis, High exchange rates, High tariffs on import and export.

In the domestic context as most severe Economic Crisis and Opportunistic behaviour of IT supplier were noted. Those risks were followed by the risks of Vendor becoming a competitor and Inflation. Surprisingly from the questionnaire results Economic crisis was ranked as more severe in the domestic context. This finding is substantial as some of the respondents in the interviews considered Economic crisis as an opportunity where they actually can renegotiate the deals and push service prices along with service levels. On the other hand this was seen as risk in domestic context as many suppliers based domestically might not have resources to keep running the companies affording the labour cost onshore.

Risks associated with Currency fluctuations, High exchange rates, High tariffs on import and export are only unique for the offshore context and as in the case of geopolitical risks they have to be mapped before an offshore venture will start. The

risk of Opportunistic behaviour of IT supplier was marked as most important in both contexts but it was more exacerbated in the offshore context as in the domestic context the risk associated with Economic crisis was reported by more respondents as more severe.

**Table 4.2** Results from questionnaire for the Economical category of risks

<b>Economical risks</b>	
<b>Offshore</b>	<b>Domestic</b>
1. Opportunistic behaviour of IT supplier 2. Vendor becomes a competitor 3. Inflation 4. Currency fluctuations – unstable currency 5. Economic Crisis 6. High exchange rates 7. High tariffs on import and export	1. Economic Crisis 2. Opportunistic behaviour of IT supplier 3. Vendor becomes a competitor 4. Inflation

### 4.1.3 Strategic risks

The category of Strategic risks is associated with business strategies of a particular company. When outsourcing whether offshore or domestic a company must align its business strategy with the IT strategy which creates several risks. In the case of Strategic risks only Market volatility is a unique risk in the offshore context. This particular risk pertains to the perceptions of ITO providers market saturation in a particular country and limited information about the market itself accessible for managers.

In the offshore context ranked as most severe were risks connected to the Transfer of knowledge and Loosing of knowledge followed by Market Volatility as the showed lowest sums of accumulated risk rankings. After those followed: Lack of understanding of customer need; Maturity, experience and expertise level of supplier; Under-delivery (work completion time); Expectations; Different Strategies; Incomplete contracting; Power asymmetries between supplier and client; Loss of control over internally generated IT and Relationship between supplier and contractor.

For the offshore context, risks can be grouped into three distinct groups. Those groups present risks that were ranked high, moderate and limited in severity. The first group consists of risks emanating from Transfer of knowledge to supplier, Loosing of knowledge and Market Volatility. This group represents the main concerns which need to be handled properly by managers in the long term perspective of IT outsourcing initiative duration. If those risks would present an overwhelming threat for IT strategy of the company no outsourcing would be conducted. Second group consists of risks associated with Lack of understanding of customer need; Maturity, experience and expertise level of supplier; Under-delivery (work completion time); Expectations; Different Strategies and Incomplete contracting. This group purports to the planning of IT outsourcing initiatives nevertheless if the first group demonstrates a major threat the second and third group would not be considered. In the last group risks associated with Power asymmetries between supplier and client, Loss of control over internally generated IT and Relationship between supplier and contractor were listed. The last group consist of risk which showed to have least severity but are results of previous risk factors.

In the domestic context Under-delivery (work completion time) was ranked as the most severe risk factor across questionnaires. Following risks were: Transfer of knowledge, Loosing of Knowledge, Incomplete Contracting, Expectations, Different strategies, Lack of understanding of customer need, Loss of control over internally generated IT, Maturity experience and expertise levels of suppliers, Power asymmetries between supplier and client and Relationship between supplier and contractor. Compared with the offshore context Under delivery was a major threat. In the domestic context risks were not grouped.

**Table 4.3** Results from questionnaire for the Strategic category of risks

<b>Strategic risks</b>	
<b>Offshore</b>	<b>Domestic</b>
1. Transfer of knowledge to supplier	1. Under-delivery (work completion time)
2. Loosing of knowledge	2. Transfer of knowledge to supplier
3. Market volatility	3. Loosing of knowledge
4. Lack of understanding of customer need	4. Incomplete contracting
5. Maturity, experience and expertise levels of supplier	5. Expectations
6. Under-delivery(work completion time)	6. Different strategies
7. Expectations	7. Lack of understanding of customer need
8. Different strategies	8. Loss of control over internally generated IT
9. Incomplete contracting	9. Maturity, experience and expertise levels of supplier
10. Power asymmetries between supplier and client	10. Power asymmetries between supplier and client
11. Loss of control over internally generated IT	11. Relationship between supplier and contractor
12. Relationship between supplier and contractor	

#### 4.1.4 Operational risks

The broadest category of risk factors was the category of operational risks. This category included the highest number of risks for the offshore context than any other category, 17 risks were identified. At the same time in the domestic context the number of risks was also highest with 13 identified risks. The operational risks category pertains to the daily management of a outsourcing venture where the highest probability of problems arising is located.

Identified as the most severe risk if left under managed in the offshore context was the Relationship between supplier and contractor. The second and the third on the list were risks of losing the Control of process and Incidence response capability. Those three risk can be considered as one subgroup as their accumulated sum of risk ratings was much more differing from the other risks' sums. They were followed by Dependency, Incomplete specifications, Inability to measure performance, Quality of personnel and work, Security and information vulnerability, Personnel Opposition against outsourcing, Productivity of personnel declines and After service (post implementation). Those 11 risks are put into one group as they represent the core of offshore outsourcing context. The second group consists of following risks: Human resources availability, Client Support, Personnel security, Personnel background, Rogue employees and Hackers.

The most severe risk in the domestic context was also Relationship between supplier and contractor, closely followed by Control of Process. The next on the list were risks

associated with: Personnel opposition against outsourcing, Client support, After Service, Inability to measure performance, Incomplete specifications, Dependency, Security and information vulnerability, Productivity of personnel declines, Incidence response time, Mobilization, Quality of personnel and work and Hackers.

In both contexts the most severe were risks Relationship between supplier and contractor and Control of process. In the offshore context the risks of Incidence response capability and Dependency were exacerbated as they were ranked in severity directly after two most severe risks in both categories. This relates to the fact that in offshore context the geographical distance is an issue and the need for Incidence response time stays critical and at the same time the dependency on the vendor increases. On the other hand in the domestic context the risk associated with Personnel opposition against outsourcing is ranked as next after the two most severe risks. In the offshore context the risks of Human resources availability, Rogue Employees, Personnel background check and Personnel security are unique to this context but were not ranked as severe. One of the respondents did not consider Hackers as a risk to outsourcing venture. The risk of incomplete specifications was not ranked as that severe in both contexts though it seemed it was more of a issue in the offshore context. Considering the Operational risk category the interviewees in general expressed a need to constant working with risk mitigation.

**Table 4.4** Results from questionnaire for the Operational category of risks

Operational risks	
Offshore	Domestic
1. Relationship between supplier and contractor	1. Relationship between supplier and contractor
2. Control of process	2. Control of process
3. Incidence response capability	3. Personnel opposition against outsourcing
4. Dependency	4. Client support
5. Incomplete specifications	5. After service (post implementation)
6. Inability to measure performance	6. Inability to measure performance
7. Quality of personnel and work	7. Incomplete specifications
8. Security and information vulnerability	8. Dependency
9. Personnel opposition against outsourcing	9. Security and information vulnerability
10. Productivity of personnel declines	10. Productivity of personnel declines
11. After service (post implementation)	11. Incidence response capability
12. Human resources availability	12. Quality of personnel and work
13. Client support	13. Hackers
14. Personnel security	
15. Personnel background check	
16. Rogue employees	
17. Hackers	

#### 4.1.5 Technological risks

The severity of Technological risk factors was ranked evenly across questionnaires in both contexts. The most severe risk was Loss of developing methods (security of code) followed by Data confidentiality. Then followed by: Network complexity, Loss of control over authentication and network perimeters and Technical change (short technology lifecycles). Although it was noted by a respondent that Network complexity is a bigger risk when offshoring. Surprisingly one of the respondents mentioned also that finding IT competence is easier offshore than domestically. The risks factors in this category are the same for each context so none of them was unique. Moreover none of the risks was exacerbated in the offshore context besides

the remark by one of the respondents that Network complexity is a bigger risk when offshoring but that was not confirmed by other respondents. It can be assumed that if provided more empirical data this risk factor would be exacerbated in the offshore context.

**Table 4.5** Results from questionnaire for the Technological category of risks

Technological risks	
Offshore	Domestic
1. Loss of developing methods (security of code)	1. Loss of developing methods (security of code)
2. Data confidentiality and security	2. Data confidentiality and security
3. Network complexity	3. Network complexity
4. Loss of control over authentication and network perimeters	4. Loss of control over authentication and network perimeters
5. Technical change (short technology life cycles)	5. Technical change (short technology life cycles)

## 4.2 Presentation of the companies

Interviews were conducted at following companies:

- *Trelleborg AB*. Trelleborg AB ([www.trelleborg.com](http://www.trelleborg.com)) is a Swedish global company, which has its headquarters in the city of Trelleborg and currently occupies 20,000 employees in 44 countries. In addition Trelleborg AB as a global engineering group it has a lot of experience in the field of offshoring as it has its own plants in several different countries throughout the world. When it comes though to IT outsourcing Trelleborg AB has only been recently involved with such ventures as they started their IT outsourcing program two years ago. The main IT processes that are being outsourced include consultancy, software development and infrastructure management.
- *Alfa Laval*. Alfa Laval ([www.alfalaval.com](http://www.alfalaval.com)) is also a global company which has its head office in Lund, Sweden. During its 125 years of experience Alfa Laval has been thriving to offer solutions for optimized processes to its clients. From an IT perspective Alfa Laval operates mainly in areas that deal with industrial computing and industrial systems. In addition, as a company it has a lot of experience in manufacturing outsourcing as it is one of the company's main processes; but during the last 3-4 years it has also been involved in several IT outsourcing initiatives. Alfa Laval has placed its interest in outsourcing IT processes like software development and infrastructure management.
- *Accenture*. Accenture ([www.accenture.com](http://www.accenture.com)) is a global management consulting, technology services and outsourcing company which has its headquarters in Chicago, US. During the last decade Accenture has started its offshoring quest by utilizing global delivery centres in South and Southeast Asia. All in all as a company it employs skilled IT outsourcing consultants throughout the world and has offshored IT processes that concern software development and infrastructure management.
- *Logica*. Logica ([www.logica.com](http://www.logica.com)) is an IT and business services company and has its head office in Great Britain. As far as outsourcing is concerned Logica

is a provider of application management, infrastructure management and business process outsourcing.

- *E-ON*. E-ON ([www.eon.com](http://www.eon.com)) is one of the world's largest investor-owned power and gas companies. In the Nordic market E-ON has produced and delivered energy in the form of electricity, gas, heating, cooling, waste treatment and energy related services to approximately one million customers. Furthermore, E-ON employ's 6000 people in the Nordic and has recently started to put focus on IT outsourcing ventures.

The people we interviewed at the above companies all have significant experience in IT outsourcing and risk management. They also hold key positions in their companies respectively ranging from the C.I.O (Chief Information Officer) of Trelleborg AB, C.O.O. (Chief Operating Officer) in systems integration and technology of Accenture Denmark, manager of corporate IT at Alfa Laval Sweden, business unit manager of Logica Sweden and corporate information security specialist at E.on Sweden. In the following section we will present a short summary of all the interview participants and their background information, so the reader can get an overview of their experience and expertise.

### **4.3 Interviewee profiles**

For practical reasons interviewees were called A, B, C, D and E.

Interviewee A is Peter Svenburg and he is the C.I.O of Trelleborg AB. Among others interviewee A holds a key role in Trelleborg's AB IT outsourcing process and is rather open minded when considering IT outsourcing initiatives. His experience in the IT outsourcing field began on '89 with processes like basic infrastructure, LANs and messaging environments. He later dealt with IT sourcing situations while running consolidation centralization processes in Heidelberg Cement. Nowadays in Trelleborg interviewee A has recently started the process to outsource some of the company's main IT functions.

Interviewee B is Åke Englund and he is the manager of corporate IT of Alfa Laval. His main activity in Alfa Laval involves management of traditionally industrial computing packages and systems. Moreover ITO is not something new for interviewee B as he has been working within that area since the millennium shift. Today because of the new decentralization process of Alfa Laval, he is managing the central IT function, called corporate IT, and also has a major role in Alfa Laval's ITO initiatives.

Interviewee C is an IT manager at Accenture in Denmark. Interviewee C requested his identity to remain anonymous during the compilation of this thesis work. He has gained most of his experience in IT while working in the mobile telephony industry as a mobile phone developer in the beginning and afterwards as a manager. Nowadays, interviewee C is not involved in any ITO initiative; nevertheless though he has vast experience in such matters and provided valuable input to this research quest.

Interviewee D is Gitte Bergknut and she is a corporate information security specialist at E-ON Sweden. Most of her experience in ITO comes from her consultancy position in CapGemini, which is a company that deals a lot with outsourcing initiatives. Currently, besides her information security role, interviewee D is also involved in the

risk management unit at E-ON where she also deals with risk situations concerning E-ON's current ITO ventures.

Interviewee E is Anette Ringnér and she is a business unit manager at Logica, Sweden with focus on LEX software. Her experience with ITO started when WM-data became a Logica partner. Logica had already an offshoring unit in India which focuses on application development and thus interviewee E became gradually involved with the entire process because of her managing role on the software that was being developed (LEX).

All in all, what should be taken into consideration before moving on with the analysis of our findings is that all interviewees had experiences in ITO situations reaching far beyond their current positions.

## **4.4 Interview results**

### **4.4.1 Interviewee A**

During his career in the Scancem group interviewee A was involved in an ITO project where his company had contracted a domestic supplier (WM-Data) for the development of a professional messaging system and with it, a local area network (LAN) that would efficiently support data transfer. There used to be an internal amateur mail system which was developed by some enthusiastic employees of the group but it wasn't enough to keep up with the company's growth. This ITO agreement worked quite well as interviewee A implies, but there were of course risks. The risks surfaced when the client pushed down the price of the contract to 20%; the vendor accepted but eventually, the outcome was that firstly they couldn't deliver properly (under delivery-work completion time), secondly the client didn't get the expected result (expectations) and thirdly they faced some virus attacks (data confidentiality and security) which, though, was not a critical problem at that time. The risks were assessed and afterwards were mitigated by offering a better contract to the supplier. Thus the supplier could access more resources and consequently they delivered better results.

Moving on while interviewee A was working for Heidelberg Cement an ITO project was contracted to HP Europe (offshore). As described, it took a two-year research process in order to find the adequate supplier. The process that was outsourced was an ERP system that would fit the company profile and business needs. According to interviewee A there were a lot of risks that had to be analyzed before signing the contract and more to say before even selecting the right supplier; for that reason they hired a risk assessment manager to deal with outsourcing project. Among those, there were risks concerning the standardization process (standardization) and security issues but those were dealt as pre-requirements (company specifications) for the vendor selection process. The critical risks appeared after selecting the vendor and they were aligned with operational issues concerning the control of the entire process. Interviewee A specifically states that:

*"...especially the risk side was heavy but also the staffing side, to manage, it was in 40 different countries; we had to have consultancy processes with unions in 40 countries and the rules differed and so on"*

Unfortunately though, because of an unexpected event the contract with HP was never signed and the project was therefore developed in-house.

In addition while being in his current position (C.I.O of Trelleborg AB), he is moving towards the direction of outsourcing the entire service of Trelleborg's AB messaging environment. As he states he wants to buy the entire service from an external offshore provider as he's in favour of the S.A.A.S (Software As A Service) idea. According to interviewee A such a decision hides communication and culture related risks and also risks concerning the extension of the contract (incomplete contracting). For example buying an entire service from a company based in China would not be the easiest of tasks in terms of communicating and being able to cover every little detail concerning the Chinese legal system on IT initiatives. Nevertheless such issues can be mitigated through proper governance and as interviewee A implies:

*"That is very important to, in the contract build up a proper governance, structure, so you are able in a convenient and secure way to deal with the problems that pop up. You have to have an anchor in up, at top level in the partner company talking to your own top level here and you should have governance with reach in every level."*

In another example of his experience in ITO while being in Trelleborg AB, interviewee A describes some small outsourcing contracts with Indian providers concerning software development projects. At this point interviewee A speaks mostly of risks concerning knowledge loss and security and information vulnerability. Lastly interviewee A speaks of and at the same time initiates to this research, the risk of compliance that exists in both offshore and domestic ITO initiatives. He describes this risk as the problem that most client-companies but also vendor-companies face when they are lacking in adequate requirements in order to meet governmental regulations. These legal requirements, for example, can be security assets that should be embraced by a client-company and its outsourcing partners in order to meet global regulations about security. Interviewee A defines the risk of compliance:

*"...and with that I mean the risk of not being able to meet governmental regulations like antitrust eh... You know as soon as you have an operation that accepts payments with credit card you have to meet the requirements of the federation of the credit card issuer, it's not called like that but it is a federation."*

All in all interviewee's B overall thoughts about ITO – either that is offshore or domestic- are positive. This optimism derives from his experience in ITO; also having in mind all the lessons he learned throughout the years he concludes by stating that an ITO venture is bound to go wrong if people start to outsource their responsibility. Thus maintaining control and responsibility is the key to a successful ITO initiative.

#### **4.4.2 Interviewee B**

Interviewee B starts speaking about his experience in ITO by providing an example when Alfa Laval outsourced to a domestic supplier (based in Denmark) the development of a packaging and desktop management applications. The risk surfaced after the contract had been signed and was due to a virus attack (data confidentiality and security) at Alfa Laval's desktop management server. This was a result of the provider's incompetence to deliver information security against the process they had developed. As interviewee A explains the problem was critical and could have been solved if they hadn't taken for granted that the supplier would have a reliable security system structured to support the developed applications. After learning from that unexpected result, interviewee B states that such risky situations were therefore mitigated by doing a more thorough audit with the supplier before signing the contract

so as to make sure that there is sufficient security in the premises that the vendor is running.

Moreover risks like cultural differences and language barriers between contractor and supplier were reported by interviewee B while his company had placed a number of development assignments to an external provider in India (INFOSYS). Specifically the problem was that the client (Alfa Laval) had linguistic interpreting difficulties while communicating orally with their vendor in India. The problem was simply solved by putting an end in the oral communications and replacing them with written forms through e-mail and chat technologies. In addition another example of an ITO project that was described by interviewee B concerned the contract Alfa Laval had with a domestic vendor (located in Sweden) about the maintenance and development of a software called sales or product configurator (this application suite as described by interviewee B was and still is of great importance for Alfa Laval). Interviewee B states that there were no critical risks during this ITO initiative, as it worked quite well. The issue that eventually came up and can be considered as a risk is that the supplier wanted to evolve their development by moving to another business direction; their contract though with Alfa Laval blocked somehow this evolution as it was occupying a lot of the company's employees and thus they decided to terminate the contract, leaving Alfa Laval without a development team for their most important software utility. The risk eventually was unavailability of human resources from the vendor's side. Alfa Laval later offshored the project to an Indian company.

Lastly interviewee B states that the ITO trend now in Alfa Laval is to buy the whole IT process from a supplier and not some pieces of it. To make it more clear, the trend is to buy entire infrastructure management processes as a service. Such a move nevertheless hides risks like loss of control of over internally generated IT but according to interviewee B it can be mitigated through accurate and specified contracting.

#### **4.4.3 Interviewee C**

From his experience in ITO interviewee C states that the two biggest risk factors he has encountered are due to communication and culture related issues. To make it more clear interviewee C provides an example of an offshore development project and describes that the main difficulties in the entire project was to establish some sort of good working relationships between the key people of the project. This problem was created because of difficulties in communication between vendor and contractor. Nevertheless what needs to be pointed out here is that according to interviewee C the communication risk appears also in local-domestic projects, though it cannot be as exacerbated as in offshore ones because domestically there are no cultural differences. To illustrate it better we provide interviewee's C statement on the issue:

*"...but it's already a problem, you know, if you just do it locally ; and within your own company, even, you may have two different geographical locations. So an office in Copenhagen, an office in Malmo or Stockholm... You see this risk with.. eh, as soon as you split something so that everybody is not sitting together then you've already seen the risk probably, even within a company... I've experienced previous employer situations where just because people are in two different floors at the same building then they don't really communicate very well together. So you know you will end up in the situation were people are even not communicating very well in the same building; so imagine taking a task and then outsource it to a customer in the other side of the town that's going to be harder"*

A way to mitigate the risk of ending up in such a situation according to interviewee C is by bringing some key people of the offshore project, onshore so that they're on site, for a distinct period of time, together with the development team in order to create a better and more edifying relationship that would make them communicate more freely back and forwards.

Interviewee C commented a lot, while prompted with corresponding questions, about the risk of knowledge transfer and more importantly knowledge loss while outsourcing offshore application development projects. He connected knowledge loss with risky situations concerning the possibility of contracting rogue employees, not very strong legal protection for IT initiatives in the offshore destination and in general security issues concerning IT like hacking or virus attacks that are more usual to occur in such countries. Interviewee C for example gives a lot of emphasis in the court system of the offshore destination:

*"in a country like perhaps China where the legislation is not that strong, the court system is not that strong around these things; that is that something you got a pattern on gets stolen and then copied and reused and maybe not sold back at your local market but at least sold to companies in China, and that of course is a risk."*

The risk of losing knowledge assets through offshore projects can be mitigated according to interviewee C by selecting a vendor which is placed in a country that has a significant legal system concerning IT legislations and intellectual property rights. For example interviewee C considers that, it wouldn't be wise to offshore a project concerning source code development to a vendor in China as the court system there is not yet robust enough handle a court case on intellectual property rights.

Further on, interviewee C identified two new risks which were discussed and stressed out during the interview. The first one is called "communication" which illustrates the issues that employees from the client's part face when trying communicate thoroughly with their outsourcing partners. The second one is "mobilization" which is better described by interview C own words below:

*"I think maybe one which I would add into here and it's to some extend it's covered by this "transfer of knowledge to supplier" but it's more just a general mobilization process. How do you handle that their getting everybody aligned not just with the supplier but also with the customer, the new way of working, so you're not from one day to the next it goes from some internal function and the company is doing whatever job there is, payrolls or some sort of R&D, finance support whatever and now suddenly there's an external company that's doing it. And all of these people they used to be able to just walk down stairs and talk to "Jens" and ask him a question and now "Jens" doesn't sit there anymore and now it's "Birgit" and she's in this other company and I mean, who do they call? How do they get through? All of that stuff it's actually a really dip task to communicate and put everybody's expectations align"*

Lastly he initiates the "relationship between supplier and contractor" risk to the strategic category and explains this addition to the fact that this relationship should be also viewed from the scope of what type of relationship would better fit the clients strategy; is the relationship going to be a master-servant one or some sort of partnership? Both types hide a strategic reasoning according to interviewee C.

#### **4.4.4 Interviewee D**

In the beginning of the interview, interviewee D gives a brief description of the IT outsourcing status in E-ON Nordic and clearly states that offshore IT outsourcing is an initiative that E-ON Nordic cannot take at the moment. There are two basic reasons

for this as interviewee D describes; firstly because of E-ON's offshoring status, (they have several units in Europe and in the U.S.) the trend at the moment is to achieve a thorough consolidation of the IT infrastructure among the different units which according to interviewee D is a difficult task because of different company cultures and different company organizations. Thus interviewee D states that:

*"...It was NO, this is too complicated too risky to do it all at once."*

Secondly because E-ON handles a lot of customer processes that are of high confidentiality, offshore outsourcing the IT development of such services is thus considered a rather risky initiative. Besides the complexity of E-ON's administrative data handling network is large and is a technology risk while the outsourcing is concerned.

Nonetheless E-ON has outsourced domestically some of its main IT functions to IT consultants from a big company in order to rebuild their entire IT strategy. This venture didn't work as expected. The main problem was that the consultants weren't enough familiar with the customer's needs; they didn't know exactly what type of business E-ON is. As interviewee D states:

*"...many times it's consultants from a big Company or somewhere else and they don't know the business they blabla IT and IT strategy but they don't know the different consid... eh considerations that you have to make due to what business you are; eh so in some cases we have an IT strategy company, strategy that is pointing to one direction while we are legally forced to go in another direction and that's...a bit frustrating"*

Thus interviewee D explains that in order to mitigate that problem and to exploit the consultant's knowledge you have to be a diplomat. That means that in one hand the client has to give a full description of the already existing IT strategy but on the other hand they have to avoid revealing data that are confidential for them.

In addition, E-ON has a contract with Logica-Sweden concerning application support services. At this point, it is made clear from interviewee D that the relationship is going well but nonetheless there are risks concerning information vulnerability. When outsourcing such processes it is most likely that the client has to have some access to sensitive data or to a restricted server in order to further develop the project. Such issues though as interviewee D declares have been mitigated by applying strong security procedures for protecting confidential IT data.

Further on, interviewee D while talking about her experience in ITO provides an example from when she was working at a large global Swedish company. The company had an offshore outsourcing contract with HP Europe concerning the management of basic IT infrastructure utilities. As interviewee D states the contract and SLA agreements between the client and the supplier were rather detailed and thorough; nevertheless an issue eventually surfaced which was surprisingly enough due to incomplete contracting and undefined specifications about what the vendor should deliver. As a result the client had no support from the vendor for several critical technical issues because such a service was not defined in the contract. Interviewee D better illustrates the problem:

*"...they did this outsourcing deal and they thought they had did really good SLA , this thick, detailed requirement of everything; and one sentence said that the network should be kept in the condition it is; and what they meant was that it should be full attached as it was when they turned it over. The outsourcing partner, they interpreted this sentence as... as is; that meant that if no eh, work – service*

*work that didn't patch, they didn't do anything to upgrade the network...So they felt that they were been tricked... but actually it was just one sentence that could be interpreted in different ways and they meant of course that it was to... they handed over a network that was in tip top condition and the meaning was: keep in tip-top condition whatever it is; but the service provider said no it should be kept as it is at that date; and three years later it was a very very lousy network, it was very unstable..."*

Lastly, it is worth to mention that E-ON Sweden has developed a computerized system called LISA that handles risk mitigation issues by providing thorough risk analysis. Interviewee D describes in depth how this system functions and how they are using it in E-ON (for further information see the transcript of the interview).

#### **4.4.5 Interviewee E**

Unfortunately because of the offshoring situation in Logica Sweden, interviewee's D examples were rather limited when discussing about ITO initiatives. Nevertheless, from her experience and having in mind the IT offshoring venture that Logica Sweden has in India, she gave some insights concerning offshore outsourcing of software development projects.

The major risks for interviewee E when considering offshore outsourcing of software development have mostly to do with the expectations that the client has from the vendor. In addition, the problem that Logica-Sweden had with their offshoring project in India could well be applicable in any domestic or offshore ITO venture. The risky situation as interviewee E states was that during a big development project that was assigned from Logica-Sweden to Logica-India there was a problem with wrong estimation of the delivery time of the project (under delivery-work completion time). The problem was a negative outcome of the poor communication that Swedish logica had with its Indian partner. As interviewee E states:

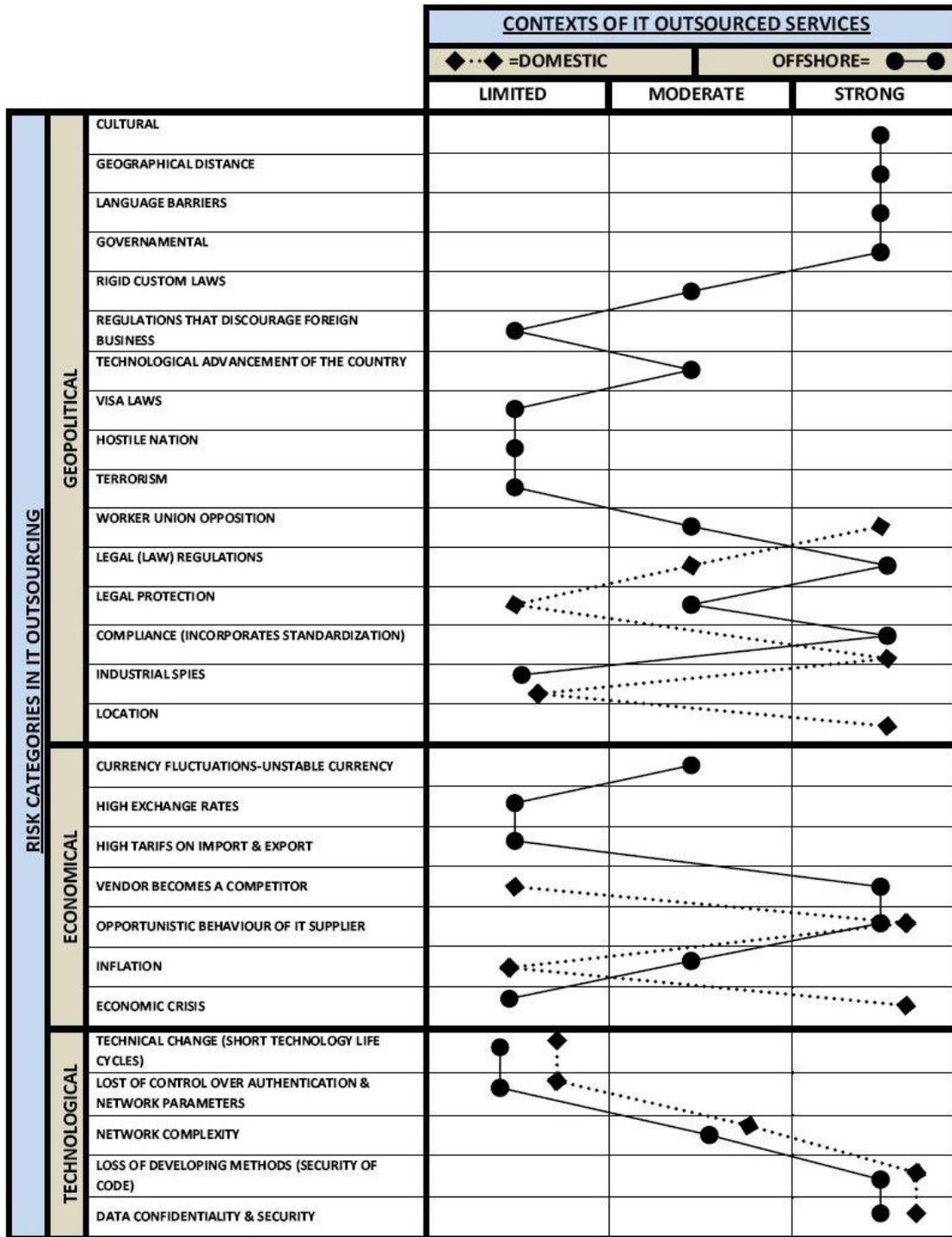
*"Eh... yes, risky situation is that when we eh... we have, if you have a big development project and it's, we depend on the time estimate is right; so that we speak to some language it's in time when picking it up, when we, we need developers in eh... India to specify an estima... estimate the time for the project eh... that can go wrong, if you don't speak the same language because If you... if you don't eh... in India for example the first time they dd... they estimate time for investigation, for eh... for meeting, for... only for hacking code.."*

Thus the project wasn't delivered on time and that created some discomposure between Logica Sweden and its Indian subsidiary. Nonetheless the matter was solved by giving more focus on the communication-relationship with the Indian employees by conducting constant half-hour meetings (via teleconferencing).

#### **4.5 Conceptual framework of risk profiles of domestic and offshore ITO contexts**

After analyzing the results from both questionnaire and interviews the proposed framework was updated by incorporating the severity of each risk according to what was found from the empirical analysis. (see Figure 4.1). Thus the severity of risks associated with the offshore context (solid line) and the severity of risks associated with the domestic context (dotted line) was created and derived from the data collection and analysis of the authors empirical work (interviews and questionnaire). In order to show how the framework works one could cast a quick glance at the risks of the technological category, for example, and see that the dotted line (domestic) follows the same path as the solid line (offshore) which thus indicates no overall difference between the two contexts. In addition in the geopolitical category if

someone looks at the risks of “Worker Union Opposition” , “Legal (Law) Regulations” and “Legal Protection” s/he will see that the dotted lining (domestic context) and the semi dotted lining (offshore context) do not follow the same track-route, thus indicating an overall difference between the two contexts. To make more clear how the framework works the lining (dotted and solid) of the “human resources availability”, “client support” and “after service (post implementation)” risks in the operational category follow a completely different route (keeping the strong severity path respectively in the offshore context whilst going by low then moderate and then low again in the domestic context) in the two contexts which thus indicates diversity.



**Figure 4.1** Framework of risk profiles of offshore ITO (line) and domestic ITO(dotted line)

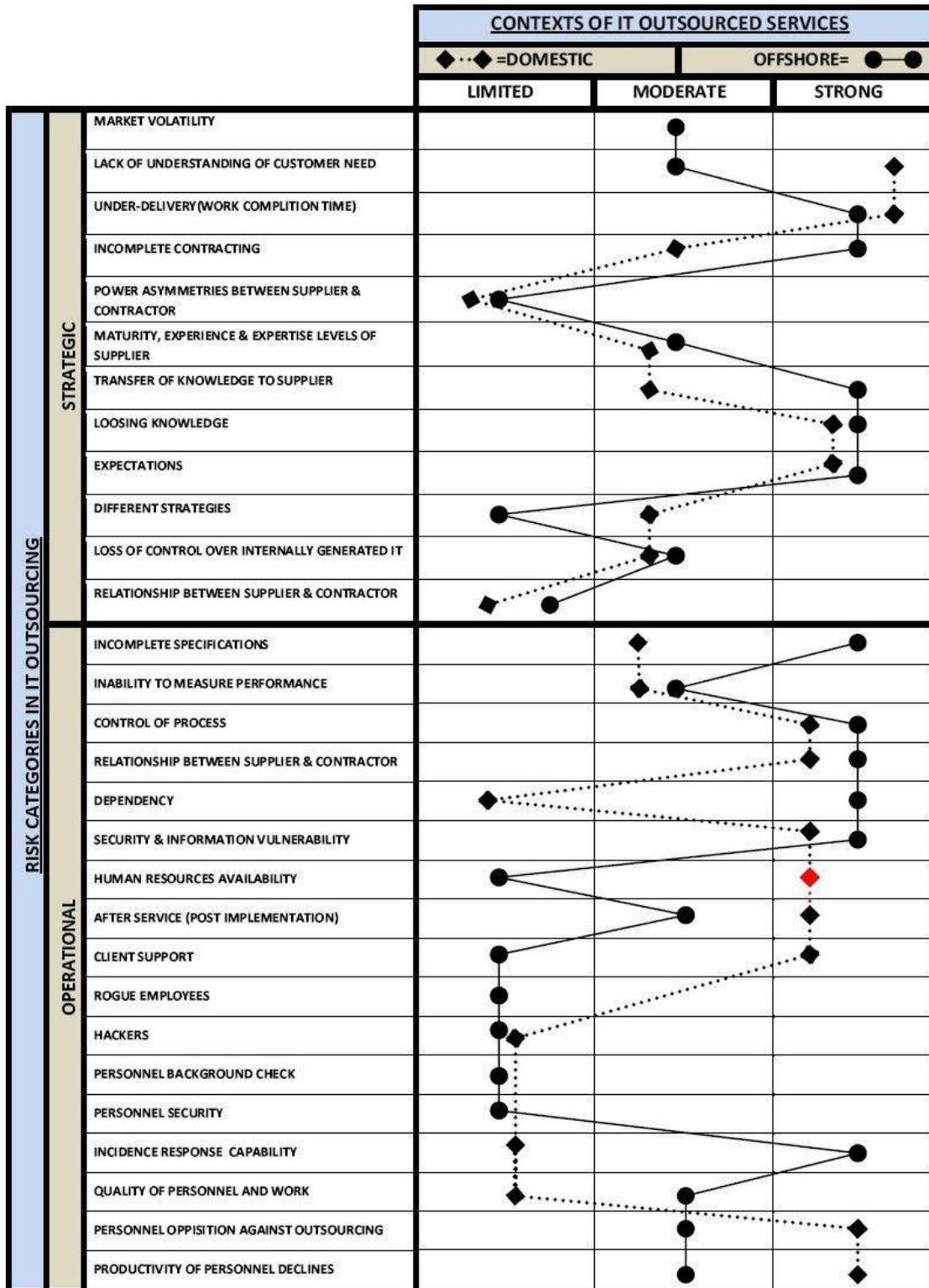


Figure 4.1(continued) Framework of risk profiles of offshore ITO (line) and domestic ITO(dotted line)

#### **4.6 Summary and contribution of Chapter 4**

In this chapter the results of questionnaires and interviews were presented. The chapter began with presenting the results of questionnaires and the risks severity in respective categories and contexts. Tables showing the rankings of risk were presented. Next the company profiles and interview profiles were presented which was followed by presentation of interview results. Interview results were presented according to the conceptual framework developed in the third chapter. Results were presented objectively. The analysis and discussion of results will follow in the next chapter.

## 5. Analysis and discussion

*In this chapter the findings from the interviews and questionnaires are analyzed and discussed. The findings are analyzed and discussed using the conceptual framework developed in chapter three. Here, first inferences and conclusions are being drawn. The chapter discusses implications of researches' findings.*

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At this point findings from the interviews, concerning risks in ITO initiatives, are going to be analyzed under the notion of the proposed and updated framework that was presented in section 4.5 . The discussion will only include analysis:

- of the noticeable and unexpected differences and similarities that were derived from the framework;
- risks that were stressed a lot by the interviewees;
- surprising findings;
- and new risks that were identified by the interviewees.

### 5.1 Noticeable and unexpected differences and similarities that derived from the framework

Starting the discussion with the geopolitical category, it should be reminded that it incorporates the biggest number of risks that are unique to the offshore context. The logic for this lies in the term “geopolitical risks” itself, which refers to risks that stem from different geographical and political situations. Such differences are mostly visible in offshore destinations.

The first noticeable difference between the two contexts was seen under the risk of legal (law) regulations where in domestic projects it is ranked as “low” and in offshore ones as “strong”. An initial explanation for this difference stands in the fact that legal problems can of course arise in both contexts but in offshore ones they can be even more complicated as different laws apply from the moment a client has contracted an offshore vendor. The fact that the legal (law) requirements risk was ranked as low in the domestic context was firstly due to lack of supporting literature, secondly due to the fact that none of the interviewees stated anything about it and lastly because it was ranked eighth in the severity questionnaire. On the contrary in the offshore context interviewee C states that several offshore locations have poor legal-court systems which itself is a risk but at the same time it can be also a risk generator. For example interviewee C states:

*“...one thing which of course you might be a little bit more concerned about is...eh, in a country like perhaps China where the legislation is not that strong, the court system is not that strong around these things; that is that something you got a pattern on gets stolen and then copied and reused and maybe not sold back at your local market but at least sold to companies in China, and that of course is a risk.”*

Thus risks concerning legal requirements can produce further risks like loss of knowledge.

Another significant difference concerns the risk of trade union opposition which is in fact the only risk that is more severe in the domestic than in the offshore context while considering the geopolitical category. The main reasoning for this was firstly denoted in the results of the questionnaire where the worker union opposition risk was ranked second. As there were no clues given by the interviewees concerning this difference in the actual interviews, a rational explanation for their ranking at this point would be the fact that the trade unions have large impact on the work in the Skåne region, and

generally in the Nordic countries. Companies must adhere to regulations provided by trade unions in order not to risk high fines and problems. Thus since all the interviewees were working for companies in the Skåne region they rationally high ranked this risk in the domestic context.

In addition the risk of power asymmetries between supplier and client are related to the duration of the outsourcing contract (Willcocks et al., 1999). Power asymmetries can arise when the customer is not able to control the supplier or embrace the new technology being used by the supplier. Suppliers can behave then in an opportunistic manner putting the relationship at stake. This risk was ranked as “moderate” in both ITO contexts as companies try to regulate the relationship with help of contracts and clearly stated expectations on service level. It was expected that this risk would be exacerbated in the offshore context but the results show that it is equal in severity in both contexts.

Lastly, as seen in the framework, in the strategic category the risks of maturity, experience and expertise levels of supplier was ranked as “moderate” in risk severity in both situations. It was expected that this risk would be stronger in severity in the offshore context. This expectation was based on the fact that the offshore partner might not hold the required competencies. Respondents provided information that actually sometimes it was easier to find competence offshore than domestically.

## **5.2 Risks that were stressed a lot by the interviewees**

The cultural risk was stressed by most of the interviewees and was also ranked second in the severity questionnaire. According to interviewee C the cultural issue is a factor that can sometimes make the communication between client and contractor even more troublesome. Cultural differences can create misunderstandings between the two parties when conversing about business related issues (Djavanshir, 2005) and thus lead to communication difficulties. This is also supported by Narasimhan and Narayanan (2009) whom state that the culture of both the buyer and the supplier should be designed in advance in order to avoid misunderstandings that lead to bad communication. Also E-ON Sweden is already facing difficulties with E-ON Germany, while running an in-house consolidation of their business processes and these difficulties according to interviewee D are among others due to cultural differences between the two subsidiary companies. For example as stated by interviewee D:

*“... I would say perhaps not the way you said but we do have some cultural differences that is frustrating to deal with. Ehmm... from both sides, I know that the Germans are very frustrated that we here in Sweden have to have meetings and we have to discuss and we have to have a consensus decision and talk to all our subsidiaries even here at the head office for Nordic, we have.. we don't just take a decision without speaking with all our ... we have 18 subsidiaries that are quite large and that we owned more than 50%, we speak to all our IT people and security stuff and to all of them before we take any major decision that are affected more (?); and the Germans they don't understand why? “We own them!””*

Thus interviewee D concludes that having the same problem with an offshore unaffiliated partner would be a great risk that E-ON is not willing to take. All the above justify the severity strength of the cultural risk in ITO initiatives. A rational question at this point would be whether such a risk stems from “country culture” based differences or “company culture” based differences. The authors agreed to stick to the “country culture” risk as the culture of a country shapes to a great extent the

culture of a company located in the particular country. The later fact is in line with Hofstede's (1983) study who supports that the actions of managing and organizing activities are indeed culturally dependent. Nevertheless, although the company culture was not considered as a separate risk by the authors, it can be distinguished and thus considered as a new, additional risk that can be applicable in both contexts and thus comparable in future studies. From literature the authors found out that the company culture risks holds the same severity in both contexts. This is implied by Bergkvist (2008b) according to whom whether an IT process is outsourced domestically or globally different (company) cultures follow in both situations as a culture influences what is and what is not possible to do in a specific context. Moving on a fairly related risk to the cultural one is that of language barriers which is also unique to the offshore context. The reasoning for its severity falls in the same norms as the cultural risk (a language is a significant part of a country's culture). Linguistic issues were highlighted by interviewee B when his company Alfa Laval was contracting an Indian vendor for a number of development projects. He clearly states:

*"...and language things actually is a risk. Which you shouldn't underestimate. We are working with Indian suppliers today and they speak grammatically they speak perfect English but their dialect is impossible to understand we can't understand what they say, specially when we talk to them on the phone."*

There are indeed costs associated with translation of both verbal and printed documents when sending work overseas (Olsztynski, 2005); fact that may lead to costly business misunderstandings. The lack of understanding an organization's values because of significant barriers in language and slang usage is also supported by Ellram et al. (2007). The risk of language barriers was also ranked third in the severity questionnaire fact that strengthened even more its severity in the proposed framework.

Further on the risk of compliance is ranked as strong in both categories. The argument for this ranking (which also points out no differences between the two contexts) lies mostly on interviewee's A statements, who was the interviewee that initiated this risk to the research. Based mostly on the fact that interviewee A has significant experience in the field of IT outsourcing his statement that vendor companies (both offshore and domestic) frequently face problems with compliance regulations when accepting an outsourced IT process prompted the authors to rank the severity of this risk as "Strong" in both contexts. Also the compliance risk incorporates the standardization risk- which was also ranked as "Strong"- as it has a greater range of implementation. Thus the standardization risk was erased from the updated framework and was added as a part of the compliance risk. In addition, to make it more clear the compliance risk according to interviewee A can involve for example inability of the vendor to meet the security standards of the client or inability of the client to meet local governmental legislations concerning a certain IT process. Another fact that stresses more the severity of the compliance risk was implied by Interviewee B when their domestic supplier proved to be not compliant enough with the security standards of interviewee's B company (Alfa Laval). This risk resulted in a virus attack at Alfa Laval's desktop management server. Lastly according to Kumar et. Al (2009) the compliance risk is a factor that should be seriously taken into account when offshore outsourcing as it deals with the probability of decreased earnings from violations of laws or regulations.

In the economic category another issue that should be discussed is the risk of "economic crisis". It is a risk that was not considered in other relevant studies and

apparently because of its recent occurrence the authors decided to initiate it in the field of ITO. Specifically the “economic crisis” risk was ranked “strong” in the domestic but “low” in the offshore context. The “low” severity of the risk in the offshore context was supported by the fact that most of the offshore vendors that the interviewees spoke of were not hit as much as the domestic ones. Thus interviewees A and C stated that offshore ITO should be pushed even more at this period because of the ongoing crisis. In their own words:

*“Interviewee A: yeah, if I speak not only for Trelleborg, that is one reason why we will see continuing outsourcing”*

*“Interviewee C: I suspect that we’ll see offshoring be pushed even more year or two, personally. And that’s just because of “cost focus...”*

It was also pointed out by both aforementioned interviewees is that any ITO venture in such period should be made with a lot of caution and with a lot of knowledge about what should be outsourced during such a period and what should not. Fersht (2009) provides some basic guidelines about how companies should approach outsourcing during the ongoing economy. On the other hand viewing the economic crisis from a domestic perspective, data from the questionnaire was the only evidence the authors had so as to rank the corresponding risk’s severity as “Strong”. The “economic crisis” risk was ranked first by the interviewees in the provided questionnaire. The deficiency in other data to support this finding leads to the fact that it should be further studied. Lastly it would be wise to add interviewee’s D thoughts on the matter, who stated the following:

*“Well, of course in one way it is something you have to be more aware of if you do outsourcing now when there is a financial crisis, you really have to make sure that the partner that you select has a stable financial situation ... cause otherwise you can get in prob.. trouble if they are going bankrupt or aaa.. being bought or something, you might end up with some completely different partner than You thought you were ending up with.. or perhaps if they go bankrupt and they shut down and then you are standing there and have to run your IT...”*

Moving on to the strategic category, risks associated with Expectations pertains to the unrealistic expectations of customers about what can be achieved by outsourcing (Willcocks and Lacity, 1999). So, for example, if only the price factor is a driver for the ITO contract and relationship between vendor and supplier the venture might end up being terminated as both parties do not know what to expect from each other.

Most severe problems found as a result of Incomplete contracting considered the prices and service levels. Interviewee C commented:

*“... I mean especially some contract ... enduring processes are fairly focused on price, let’s say. If price is the only factor that has been considered when they’re delivering the... picking who’s going to deliver the project then companies have an incentive fortunately enough situation to make their price as low as possible and then try to maneuver afterwards ... and that has been seen thousand of times around the world..”*

Interviewee A mentioned that because of different expectations and incomplete contracting he was forced to terminate a contract before the actual ending date. Further Interviewee A commented that you are unable to foresee all the problems that might appear while managing the ITO venture thus:

*“...you will never be in position to foresee all the problems coming. It means that you will never end up with a full covering contract. That is very important to, in the contract build up a proper governance, structure, so you are able in a convenient and secure way to deal with the problems that pop up. You*

*have to have an anchor in up, at top level in the partner company talking to your own top level here and you should have governance with reach in every level."*

Incomplete contracting and Expectations taken together describe the issues connected with the Relationship between supplier and contractor. Further the respondents commented that context does not matter whether it is offshore or domestic ITO as the process of contracting works in the same way. Thus it was expected that those two risks would rank also high in severity in both contexts. Surprisingly when Expectations was ranked as severe in both contexts, risks associated with Incomplete contracting in the domestic context was ranked as moderate. This result is related to the fact that while outsourcing domestically there is a more thorough understanding for the laws regulating the contract and relationship and at the same the contact with the supplier might be seen as easier to maintain because of the abate influence of some risks from the Geopolitical category.

Market volatility was mentioned as the only unique risk in the strategic risks category for the offshore context. The risk was ranked as strong which was expected. Ellram et al. (2008) points out that the more volatile the supply market environment is the less likely some of the professional services will be offshored. It was expected that because of the economical crisis and instabilities in some areas where offshore outsourcing work is being done this risk will be exacerbated in the offshore context. Although in the results of the questionnaire this risk is in the top three, the interviewees commented that they are able to handle this risk by auditing the outsourcing partners and constantly staying updated with the situation in the particular region. The later fact goes in line with the mitigation practices for an efficient customer-supplier relationship, which was mentioned thoroughly in the theoretical background. As well the offshore ITO supplier companies have become more clever so the difference between domestic and offshore supplier diminishes in favour of the offshore supplier. Interviewee A comments:

*"...and they have become... they are clever, they have become more Europeanized in their approach towards me. They have offices in Sweden, in London and so on; so I don't see any difference between those big companies located in Asia compared to IBM or the others here in Europe group which go the other way."*

The risk associated with Under-delivery was ranked as severe in both contexts which showed that from a strategic point of view there is no difference between the two contexts. It was expected that this risk would be exacerbated in the offshore context because of the geographical distance. Initially the results from the questionnaire showed that it was less severe in the offshore contexts, but while conducting interviews respondents referred to situations where it was a major threat. The respondents said that the Under delivery is a threat in both contexts if the work process is not managed properly which is in line with evidence found in literature (Rottman and Lacity, 2008; Rottman and Lacity, 2006). Respondents further commented that in order to protect the company from this risk occurring in one of the ITO contexts you need to have good working practices in place, have contracted a reliable vendor, have proper management practices and have proper specifications. Interviewee E commented:

*"Eh... yes, risky situation is that when we eh... we have, if you have a big development project and it's, we depend on the time estimate is right; so that we speak to some language it's in time when picking it up, when we, we need developers in eh... India to specify an estima... estimate the time for the project eh... that can go wrong, if you don't speak the same language because If you... if you don't eh... in*

*India for example the first time they dd... they estimate time for investigation, for eh... for meeting, for... only for hacking code..”*

Risks associated with Lack of understanding of customer need were ranked as strong in severity in the offshore context and only as limited in the domestic context. This finding is related to the Cultural and communication issues. In the domestic context because of the same culture and language according to respondents it is easier for a vendor to understand the customer. The customer on the other hand can express their needs more clearly. This risk is also affiliated with the business strategy of a particular company which is represented by the risk of Different strategies. Any specific business strategy requires alignment of its IT strategy and vendor adherence to their business type. Interviewee D commented:

*“...many times it’s consultants from a big Company or somewhere else and they don’t know the business they know IT and IT strategy but they don’t know the different concind... eh considerations that you have to make due to what business you are; eh so in some cases we have an IT strategy company, strategy that is pointing to one direction while we are legally forced to go in another direction and that’s...a bit frustrating”*

Risk of Different strategies was though ranked as “moderate” in the domestic context and “limited” in the offshore context. The explanation to this fact is that interviewed companies tend to outsource less critical areas of work to the offshore suppliers thus not needing to align their business strategy with vendor’s strategy. Still the preferred outsourcing option when outsourcing important IT processes is domestic outsourcing and retaining high degree of control over the outsourced process.

Risks associated with the Transfer of knowledge stem from the outsourcing operations where the customer has to transfer some specific domain knowledge to the supplier (Rottman and Lacity, 2006). This risk is ranked “strong” in the offshore context which can be related to the communication and cultural issues. While transferring knowledge to an offshore supplier, about a company specific process or software development, lots of care needs to be taken. Interviewee B commented that they outsourced the development of a company’s specific software to India after being abandoned by their domestic supplier. Interviewee B said that it took time to create again the domain knowledge about their software and put efficient development practices in place at the offshore partner. In the domestic context this risk was ranked as moderate as the issues related to communication and culture were expected to be minor. Nevertheless this risk was mentioned as one of the most severe in both contexts in the questionnaire. Transfer of knowledge is a risk related to a risk factor called Mobilization in the operational category thus it will be discussed later on.

The risk of Losing knowledge has been considered from a strategic point of view by respondents in terms of legal protection, theft of intellectual property and loss of human capital. The risk was ranked as “strong” in severity in both categories whilst researchers expected it to be more severe in the offshore context. Respondents mentioned that situation of knowledge loss happens in both contexts. Interviewee C comments:

*“As part of outsourcing comes with (or is part of) the work then there’ll be some countries that they’ll say that it can’t be on them (that is: they can’t outsource to those countries), where there are very weak legislations around, protection of intellectual property rights for example. So that can be an issue sometimes for the companies that have their development done in China; just as an example. I mean there are plenty of companies throughout history that have also had a problem with some of*

*their key personnel have a good idea and then leave from the company to start their own little stuff... So I mean that happens also in Denmark, in the U.S, in Sweden or wherever. So, I mean of course it's easy to be frightened of it happening in India or China or something like that but I mean the problem itself is not a new one. Eh, one thing which of course you might be a little bit more concerned about is...eh, in a country like perhaps China where the legislation is not that strong, the court system is not that strong around these things; that is that something you got a pattern on gets stolen and then copied and reused and maybe not sold back at your local market but at least sold to companies in China, and that of course is a risk."*

The risk of Losing control over internally generated IT is related to the risk of Losing knowledge. In strategic perspective it is perceived in terms of legal protection, loss of human capital and theft of intellectual property. Those two risks are closely related to each other. Findings suggested that the risk of Losing control over internally generated IT should not be further considered. The knowledge represents the internally generated IT.

Moreover in the operational category the risk associated with Human resources availability was also first considered to be only unique to the offshore context of ITO but during the interviews respondents commented that this risk was stronger in severity in the domestic context. According to Interviewee C the competence is easier accessible in the offshore context thus this risk factor is limited in severity in the offshore context. Interviewee B comments:

*"We have learned a lot how we are should, order stuff from them in an efficient way, how we write specifications and so on, so from that perspective we also know that we would like to have more resources in that area so I think we would like to expand and that's why we trying out with Indian company because there is lot, you know, there is always in this... in this part of the world the competence is available, so it is easier, or much easy to find this kind of competences.. I should say that the main reason in this case is the availability of resources.."*

On the other hand in the domestic context the availability of human resources was considered as "strong" in severity as respondents reported that it is harder to get competence onshore. This risk factor shows the difference between the two contexts. Those findings go in line with literature as it was reported that besides cost cutting, the availability of resources is the second driver of outsourcing (Ghodeswar and Vaidyanathan, 2008).

Also, in the offshore context the risks of Rogue Employees, Personnel background check and Personnel security are unique to this context but were not ranked as severe as it was expected. The respondents did not see problems with those issues as already existing mitigation practices are in place. Interviewee B said that before they go into a ITO venture they audit the particular company using their own lawyers. Thus those risks do not create any differences between the two contexts.

One of the mostly discussed risk's in the operational category which was of crucial importance to any ITO venture was the Relationship between vendor and customer. As it was shown in the strategic category this particular risk has implications on the whole ITO venture. In the operational category though, this risk is considered on the practical level in the meaning of how to sustain and manage the relationship in the daily operation. This risk was not pointing to any differences between the two contexts and was ranked as "strong" in severity in both contexts because of strategic implications. Followed by this risk was the risk of Incomplete specifications which referred to what actually needs to be done by the ITO partner (Ellram et al., 2008). All

the respondents mentioned in the interviews issues related to not specifying enough clearly what was supposed to be done. As Interviewee B says:

*“Its always ahm.. the biggest risk, you have to have in mind in my word, very clear definition on what kind of service you try to buy, because I have seen a lot of stories in the past where you actually think you will get something but the supplier has another view of what he should deliver. That is one thing and that is even more important when you go offshore..”*

This comment shows the difference between the two contexts. From the operational point of view the risk of Incomplete Specifications is ranked as “moderate” in severity in the domestic context whilst being “strong” in severity in the offshore context of ITO. This suggests that the Relationship between vendor and supplier should be treated not only from a strategic point of view but also encompassed in the operational issues.

The next risk which differentiated the two contexts was the risk associated with Dependency on a vendor. Today dependency on a particular vendor in ITO operations is growing immensely (Diaconou, 2005; Rottman and Lacity, 2008; Kern and Willcocks, 2000). The dependency was ranked as “limited” in the domestic context and “strong” in severity in the offshore context. This result shows the discrepancy between how companies see outsourcing in the operational perspective. It is assumed that the risk of dependency will not evolve into further problems when the vendor is located onshore; but when the vendor is located offshore the dependency issues will exacerbate. The risk of dependency relates further to the risks associated with Client support. Surprisingly the farther the vendor was located the less risk was associated with Client support. On the other hand in the domestic context the Client support risk was ranked as “strong” in the severity. This relation could develop another discrimination for the two contexts however that cannot be assumed on such a small research group. Interviewee A, B, C and D mentioned cases from their experience where there were problems in both contexts however it could not be assumed that in domestic context the Client support is more risk prone. The literature in this case is also divided as there are good and bad examples of ITO ventures and particularly the Client support. Thus it was assumed that Client support is an issue which has to be resolved in every ITO operation separately.

Another differentiator between the two contexts in the operational risk category is the risk associated with the Incidence response capability. Interviewees commented that if an incident happens onshore it is faster discovered which diminishes this risks’ severity whereas if an incidence happens offshore it might be covered by the supplier on purpose. The latter case is in line with literature which suggests that the offshore provider usually has more incentive to cover up an incidence rather than notify the customer (Goodman and Ramer, 2007). Interviewee B mentions the incidence:

*“What happened was that we signed a contract with a (Danish) supplier around packaging and desktop management applications. You know, the management roll out and it was in the older days, couple of years ago, and we wasn’t really that professional so we just find a deal that was concentrating on the task and so on and than we had, later on we had a problem with virus attack. We started to trace that, it ended up that the server that the supplier was running for us connected our network with the desktop management server which, you know, have access to everything. That was the most unprotected area we had. So we started an audit with them by that time and we realized that they didn’t have any local protection at all and it was very bad shape and no virus protection and..”*

Interviewee E commented on Incidence response capability in terms of how you stated the incidence management in the contract:

*“It is worth to have a ... that is one thing you could have.. to have a incidence management processes and incidence management responsibilities in your contracts when you are doing an outsourcing deal. Because incidence will happen and one thing that is very important that you think of from beginning is what kind of requirement of proof do you have. The proofs are to 90 % logs..”*

This point of view relates further to the risks associated with Security and information vulnerability. There were no differences in the two ITO contexts considering this risk. In both contexts the risk was ranked as “strong” in severity. This implies that whatever deal is signed the security and information vulnerability should be scrutinized.

Furthermore the findings suggest that the risk associated with Quality of personnel and work is less severe in the domestic ITO context whilst being moderate in the offshore context. This difference is very small and can depend on the fact that personal issues such as high turnover of personnel by offshore suppliers interfered with the success of the ITO initiative (Rottman and Lacity, 2008). This issues has to be further investigated.

Risks of Personnel opposition against outsourcing and Productivity of personnel declines were ranked respectively as “moderate” in severity in the offshore context and “strong” in the domestic context. The latter case of domestic context of ITO can be traced back to the literature where Barthelemy and Geyer (2005) showed that the personnel opposition is one of the dampers of the ITO and thus while a company is beginning to outsource their employees might be affected and as result not perform well. This risk was realized by Interviewee A who was aware that because of the ITO he will loose some of the employees but he did not express it as a major risk. Overall these issues needs to be further studied.

To sum it up according to one of the respondents in the operational category of risks there are no major differences in both contexts. In all ITO ventures it is important to build a trustworthy relationship with the vendor and it is important that the purchasing company has its processes in control. If a customer will try to outsource something they do not have a good, steady process for, they will just export their problems to the vendor putting the relationship at risk. In order to outsource a process, one has to clearly specify what he has and what is being outsourced.

Thus generally the findings suggest that if a company is going to conduct ITO domestically or offshore it has to know what IT assets it posses and what the company wants to achieve with the outsourcing venture. By doing so the company creates more understanding of themselves for the prospective vendor and begins to build a relationship. Companies through years have learned that they can not outsource responsibility and control. Interviewee A comments:

*“...we outsourced business processes around the country. It was exactly the same thing, we didn't have proper processes in place, then you can't outsource. You can't just tell a company please handle my accounting; you have to give them well defined processes, if you don't have that you have to develop it first together with them and then they can start the operations, otherwise it would be a fail.”*

### 5.3 Surprising findings

The authors of this thesis, after analyzing the empirical data, surprisingly discovered that the risks of geographical distance which was unique to the offshore context and the location risk which was unique to the domestic context can be discussed under the same norms as their underlying reasoning is due to location issues; either they appear between different regions, for example same country but different cities, or they appear between different countries. Thus, eventually the two risks could be compared under the two different contexts and the result was that they share the same amount of severity in both contexts. This can be simply explained by an example interviewee C provided in his effort to describe that communication risks are connected with location related risks even in domestic projects. Specifically he stated:

*...and you know I've experienced previous employer situations where just because people are in two different floors at the same building then they don't really communicate very well together... So you know you will end up in the situation were people are even not communicating very well in the same building; so imagine taking a task and then outsource it to a customer in the other side of the town that's going to be harder.*

Thus the location issue or in its “exacerbated” form the geographical distance can hold the same grade of severity in both ITO contexts (Strong).

Moving on to the economical category the framework revealed a remarkable result which was not expected by authors. This result was associated with the risks of “opportunistic behaviour of IT supplier” and “vendor becomes a competitor”. What should be pointed out before discussing this result is that these two risks are indeed affiliated with each other. This is explained by the fact that the vendor first starts acting opportunistically towards the client’s know-how for example and then they gradually may “betray” their partner and become competitors. This rational flow was an expectation by the authors in both contexts. Surprisingly the results showed that although this “flow” is followed in the offshore context by ranking the severity of both risks as “Strong” in the domestic context the opportunistic behaviour risk is ranked as “Strong” but the vendor becomes a competitor risk is ranked as “low” thus leading to an unexpected and contradicting result. The logic behind the results in the offshore context is explained by the fact that some of the most popular overseas destinations lack laws that would prevent such situations; this fact may initiate, in the beginning, an opportunistic behaviour of the IT supplier which may gradually lead to the generation of an unanticipated competitor. Such risks can arise for example, as interviewee C states, in offshore countries with poor legal systems where the vendor has no fear of stealing or copying the client’s pattern on something and thus gradually change their role from vendor-associate to competitor. It would be wise to add here that the risk of opportunistic behaviour of the vendor was also highlighted by Ellram et al. (2007) whose research also showed that such situations in offshore ITO can lead to adverse and severe outcomes. On the other hand the reasoning behind the results in the domestic context is rather cloudy. The result indicates that domestic suppliers would often act opportunistic towards the client but seldom would they become competitors.

No explanation for this result was mentioned by the interviewees although in the questionnaire the “opportunistic behaviour of the supplier” risk was ranked second and the “vendor becomes a competitor” risk was ranked third putting it in the same position with the “inflation” risk. The later result prompted the authors to rank it accordingly in the updated framework. In literature the issue has been raised by

Willcocks and Craig (Logica The Outsourcing Enterprise: Building core retained capabilities, 2007) according to whom in ITO projects (domestic or offshore) different terms and conditions are a source of friction and resentment; suppliers may turn lack of in-house skills to their own opportunistic advantage; and in-house employees may stand back and let supplier staff take all responsibility. Nevertheless no evidence was found in the domestic context that pointed out a turnover from the supplier which would gradually convert them from associates to competitors. Thus the authors conclude that there is an underlying difference between the two contexts but it's mostly based on the fact that most domestic projects are developed under the surveillance of a "tough" contract which averts because of domestic legislations pattern larceny and thus mitigates the risk of the vendor becoming a competitor.

Further on by casting a quick glance at the framework one could say that there are no differences in the technological category between the two contexts. This is an interesting and remarkable finding that supports what was stated in the theoretical background of the technological risks category. Referring back to that, it shall be reminded that nowadays offshore suppliers are as technologically adequate as their domestic competitors and have nothing to be jealous about when considering new and advanced technologies. This is a fact that occurred gradually and with the help of the globalization effect, as the intellectual capital of advanced countries was gradually incorporated by low-cost offshore destinations (Bodarress and Ansari, 2007). Thus since in both domestic and offshore locations the technology remains more or less the same the risk are bound to have the same severity.

The interviewees also provided valuable input supporting the aforementioned result. Interviewee B stresses out that data confidentiality and security is a significant risk as his company's desktop management server faced a virus attack due to the domestic client's insufficiency to provide adequate security. Also interviewee C supported the same notion, though considering the offshore context. He stated that security issues concerning IT like hacking or virus attacks are more usual to countries with low legal protection about such matters. Also data derived from the questionnaire showed no differences in the overall ranking between the risks as the interviewees ranked them the same in both contexts. Nonetheless Goodman and Ramer (2007) provide a study that suggests that several technological risks like network complexity and data confidentiality and security are more exacerbated in the offshore context. The later fact shows the limitation of the authors research and thus a further study could be denoted.

Lastly, an additional and noticeable problem was found that can develop into a risk factor in the strategic category if not managed properly. The problem considered the opposition against outsourcing of the management layer in a particular company. This finding was mirrored in the study by Barthelemy and Geyer (2005) in which they investigated outsourcing in Europe. Nakatsu and Iacovou (2009) found that the lack of support from top management is a major risk in both contexts of outsourcing. The respondents commented that if you have no support from the management for the ITO initiatives then the whole operation will be at stake. Interviewee A comments:

*"You have to have an anchor in up, at top level in the partner company talking to your own top level here and you should have governance with reach in every level."*

#### 5.4 New risks identified by the interviewees

While discussing about the language barriers and cultural based risks, a new risk was initiated by interviewee C; this risk is engaged with communication related issues and can occur in relation with the two aforementioned risks. Interviewee C simply called it “the communication risk”. This risk exists in both the domestic and offshore context and thus it can be compared. What was noticed here is that communication related issues hold the same amount of risk in both contexts. This finding was made explicit by both interviewees A and C. Specifically when interviewee C was questioned about offshore ITO initiatives he clearly stated that:

*“...I would say that the number one risk is communication”*

But also later on he agreed that communication is still the number one risk also in domestic ITO initiatives:

*“KM: ...and in domestic, which is like the most important risk factor you consider? When you onshore. Interviewee C: Well it’s still the same, I would still say that it is the communication...”*

Interviewee A had the same line of inquiry about the communication risk; he implied that because of the ongoing globalization communication related risks do not follow any discrimination, they can occur either you follow the domestic or the offshore path.

In addition, while starting the discussion about the strategic risk factors it has to be mentioned that the risk associated with Relationship between supplier and contractor was added to this category after the first interview, as the respondent commented that the relationship with the supplier is also of a strategic nature. Beforehand the researchers only considered this risk in the operational category where this particular risk was ranked “strong” in severity in both ITO contexts. Interviewee C further commented on that matter:

*“...and then there was actually another one that occurred to me when I was going through it... Yeah I guess that’s also covered by your “relationship between supplier and contractor” and I would probably put that up in the strategic level as well like I was saying before about having some sort of a partner alliance rather than just a strict contractual craft. So...so, I mean that’s really at the strategic level that is you know, how are you really going to end this relationship? Is it going to be a kind of master-servant client supplier or is it going to be some sort of partnership? So you need to have really thought about that before going into the whole outsourcing discussion.”*

The nature of relationship is evolving towards strategic partnerships and alliances. Interviewee C commented further:

*“So you’re much better off having some sort of an alignment between the groups; so that they have a common interest or common incentives to succeed. Thus it’s more like a partnership rather than just a strict customer-supplier contract or relationship.”*

This was also confirmed by Interviewee A who stated that if (in the relationship) there is only one winner, it is a bad start as it is important that both parties get something out of it .

This reasoning is aligned with the evidence found in the literature that the relationship with supplier should not only be treated in operational terms in day-to-day management but be incorporated in the whole IT outsourcing venture strategy (Rottman and Lacity, 2006; Deloitte, 2008). Furthermore Willcocks et al. (2000) suggested that ITO is only successful when relations are effective and functioning. A contract does not substitute the development of a relation. Thus the managers in both

ITO contexts should work not only day to day with relationship management but try to incorporate a relationship strategy development in the ITO venture. This is related to the risk mitigation practices described in the second chapter. Developing a viable relationship with the supplier and signing good contracts are the most influential mitigation strategies and they were stressed by the interviewees.

Surprisingly despite the support from the literature other respondents ranked this risk factor as “limited” in severity both in offshore and domestic contexts in the questionnaires. This might have been due to the fact that the risk factors of Incomplete contracting and Expectations were presented as first. Those two risk factors compose the risk of Relationship between contractor and supplier being regulated by a contract and according to Willcocks et al., 2000 contracting in ITO is seen as the beginning of relationship. A poor contract can stipulate the development of good relationships but in its core it is about getting the foundations of the ITO initiative in place and regulating the legal and technical issues. Thus after having conducted the interviews the risk of Relationship between supplier and contractor was ranked as “strong” in severity in both contexts in the strategic risk category.

Lastly, an additional risk was also identified in the operational category. Interviewee C added the risk of Mobilization which pertains to getting the working relation and practices on the move. This risk relates back to the strategic category to the risk associated with the Transfer of knowledge to the supplier. The initial risk in the strategic category is more of a static nature and considers the long term relationship. The risk of Mobilization added to the operational category is the practical implementation of the initial risk from the strategic risks category. Mobilization involves aligning all the personnel not only with the outsourcing project but also with the supplier’s manner of working. It involves setting up good communications patterns and aligning everybody’s expectations. Interviewee C comments:

*“...yeah of course, I think maybe one which I would add into here and it’s to some extent it’s covered by this “transfer of knowledge to supplier” but it’s more just a general mobilization process. How do you handle that their getting everybody aligned not just with the supplier but also with the customer, the new way of working, so you’re not from one day to the next it goes from some internal function and the company is doing whatever job there is, payrolls or some sort of R&D, finance support whatever and now suddenly there’s an external company that’s doing it. And all of these people they used to be able to just walk down stairs and talk to “Jens” and ask him a question and now “Jens” doesn’t sit there anymore and now it’s “Birgit” and she’s in this other company and I mean, who do they call? How do they get through? All of that stuff it’s actually a really dip task to communicate and put everybody’s expectations align. So I’ll call that “MOBILIZATION”.*

## 6. Conclusion

*In this chapter the research purpose is concluded. The conclusion is reached through by first answering the research questions and then answering the investigation questions. In the end of this chapter limitations and suggestions for further studies are presented.*

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The purpose of this research study was to identify decision parameters in choosing between different IT Outsourcing alternatives. It was done through exploring whether there are differences between the offshore and domestic contexts of IT Outsourcing based on risk comparisons involved in domestic and offshore contexts of ITO. In order to achieve this goal three research questions were developed.

At the outset of the study researchers needed to gain a deep understanding of the ITO field. The first question posed by researchers was to discover *what has been previously studied about risks and risk mitigation in IT outsourcing*. It was found that ITO has been studied for the last 18 years, just some years after the first ITO ventures started. The first ITO ventures were done domestically and the offshore ITO was at its infancy. The first papers concerned the practice of ITO. For the last 10 years a higher delivery of articles consider both contexts of ITO was observed and risks were starting to be discussed. More recently the focus of ITO risks studies shifted toward the offshore context as more deals are signed with offshore suppliers. Risks were discussed from the perspective of discovering what the risks were and how they were mitigated.

While conducting the literature review researchers came across a huge number of distinct risk factors and numerous risk frameworks. For most of the risks, mitigation guidelines stemming from ITO practice were provided. Nevertheless researchers found limited literature about comparisons between risks involved in the two distinct ITO contexts. The comparison between risk mitigation practices for offshore and domestic risks was not found. The lack of comparisons between risks and risks mitigation practices presented an important risk issue as companies willing to engage in ITO ventures need to know in a comprehensive form which option is more suitable for them. The first investigation question is answered in details in the second chapter of this thesis.

The second investigation question was to find out *which risks are exacerbated in the offshore IT Outsourcing initiatives*. In order to answer this question literature review and empirical investigation was conducted. It was found that risks associated with: Culture, Geographical Distance, Legal (law) regulations, Standardization, Vendor becomes a competitor, Opportunistic behaviour of IT supplier, Loss of developing methods, Data confidentiality and security, Under delivery, Incomplete contracting, Transfer of knowledge to supplier, Loosing of knowledge, Expectations, Relationship between supplier and contractor (both in Strategic and Operational risk category), Control of process, Security and Information vulnerability and Incidence response capability were exacerbated in the offshore context. Those findings provided the first basis to comparing the domestic and offshore context of ITO.

The third investigation question was to find out *which risks were equal in severity in domestic IT outsourcing and offshore IT outsourcing and which were significantly different*. Provided the answers to the first question and gathered data it was found that there were six significant differences between risks in the two ITO contexts. The

first two significant differences were found in the Economical category of risks which concerned the risks associated with Opportunistic behaviour of IT supplier and Economic crisis. The remaining four significant differences were found in the Operational category of risks and concerned the risks associated with Dependency, Human resources availability, Client support and Incidence response capability. Rest of the risks were equal in severity across both ITO contexts with some small differences in the severity that did not make a significant difference.

The answers for the two investigation questions are thoroughly discussed in chapter five where the findings are analyzed and discussed.

After answering the investigation questions researchers were able to answer the research question: *What is the difference between the domestic and offshore context of ITO based on the risk severity comparisons?*

A conclusion may be drawn that there are differences between the two ITO contexts from a risk perspective. Although the differences which were significant were not enough in number and the other risks which are crucial for the positive outcome of a ITO venture like for example: Relationship between supplier and vendor or Incomplete contracting were found to be strong in severity both in the domestic and offshore ITO context. This implies that equal level of care and consideration is being taken by managers while maintaining the ITO ventures.

For the academic field, findings contributed showing that there are less investigated areas of ITO, for example personnel opposition against ITO. As a second contribution, this research provided a validated list of risks identified from ITO literature and their severity ranking in both ITO contexts. This research can be used as a guide for further inquiries into the field of ITO pointing towards essential issues in ITO.

As a contribution for the ITO practitioners, findings suggest that the above conclusion is related to the fact of globalization and that offshore suppliers possess the same if not better skills and competencies as the domestic suppliers. Companies wanting to engage in ITO operations face the same level of severity in the most influential risk factors. While choosing the vendor the client company must scrutinize their own processes and precisely specify what is going to be outsourced. The companies must learn that they can not outsource responsibility which is a viable issue in both ITO contexts.

As a concluding remark findings suggest that the trend to offshore outsourcing will continue to grow which was also shown in the study done in CIO Magazine Sweden (2009) where CIO's were asked if they consider offshore ITO and a growth since last year was observed. Furthermore it is believed that the study resulted in a valid comparison of offshore and domestic outsourcing risks regarding their severity in the two contexts.

## **6.1 Limitations and further studies**

It was discovered that in general there is no difference between the two ITO contexts from a risk perspective. Although the most important risk factors were identified and compared in both contexts a limitation was that the comparisons between the two contexts was qualitative in nature. Furthermore the attempted to encompass a broad perspective while identifying risks. As a result the relations between the risk factors

could not be investigated. Further study could involve more experts within the ITO field thus making the framework more valid and shedding more light on the significant and small differences found.

A questionnaire was provided for every interview but the amount was not enough to draw quantitatively valid conclusions from them. The results from questionnaires were compensated with qualitative interviews. A further study could utilize the questionnaire developed in this study with some changes due to the findings, and the questionnaire could be sent to a high number of companies involved in ITO in Sweden and Denmark to create a more comprehensive picture of differences between the two ITO contexts regarding the risk severity. Whilst conducting a quantitative study relationships between the risk factors could be shown. Altogether the further studies should be bigger in the amount of gathered data to be able to explore more the significant and small differences between the two ITO contexts.

Another limitation to this study were experts which were employees of large companies that have been conducting ITO for many years and have a lot of practice. Further studies could investigate how medium and small sized companies work with ITO as there is a growing number of small and medium IT companies that make use of ITO.

## **Appendix A – Interview Instrument**

### **Introduction to interview**

Present researchers to the interviewee. Present the interviewee to the purpose of research. Explain the agenda of the interview and why he/she was selected to participate in the study. Ask if the interviewee has filled the questionnaire and understood the risk list. Gain the consent to record the interview by asking the interviewee if it is ok that the interview will be recorded. Ask the interviewee if he agrees that his name will be mentioned in the interview and that he will be quoted. If not, discuss the anonymity level.

### **Interviewing**

#### **Background questions**

1. What is your educational background?
2. How long have you been working with IT and IT outsourcing?
3. What is your current position at the company?
4. What are your general experiences about IT outsourcing initiatives?

#### **Preliminary inquiries about IT outsourcing**

1. How important is the outsourcing unit of the company?
2. Are the company's cost saving the main driver of outsourcing initiatives?
3. Why did your company decide to outsource its IT assets? ( Reasons and decision criteria for outsourcing)
4. Which part of the IT department did you outsource? (application and software development, infrastructure management, consulting or something else..?)
5. How did you select your vendor? Did you follow a certain selection process? (vendor selection criteria and process)
6. Do you outsource in-shore (domestic), offshore or both? Define why you chose this specific type of outsourcing.
7. Do you consider outsourcing a risky process?

#### **Risk Specific Questions**

1. What do you consider as a risk in IT outsourcing?
2. Which category of risks do you consider most important (provided the category list) at a first glance?
3. Do you see any differences considering risks in domestic IT outsourcing and offshore IT outsourcing?
4. How do you mitigate those risks?
5. Can you describe any incident that occurred that can be identified as a risky situation while outsourcing IT assets?
6. Can you describe any incident that can be a result of a certain category of risks?
7. How important are the outsourcing initiatives for the operation of the company?

8. Has your company developed any risk mitigation guidelines?(like Deloitte)
9. Is there a form that you use when contracting suppliers? Some specific rules that you follow?
10. Do you consider economic crisis a major threat for outsourcing?
11. Is the relationship between you and the supplier a critical success factor for outsourcing and mitigating risk? Explain why...
12. Is this relationship the main concern in IT outsourcing initiative?
13. Do you intent to sign heavily specified Service Level Agreements?
14. Are you aware of the “winners curse”?( if the interviewee does not know what it is we will explain)
15. According to you what is the general way to mitigate risk?

**Ending Interview**

Thank the interviewee for his/her time and explain how the data will be used further. Ask if further contact is possible if some extra information is needed.

## Appendix B – Questionnaire

### Risks in IT Outsourcing

Please indicate the severity of risks in the following five categories by putting them in ascending numeric order. The numbers in brackets after category names indicate the number of risks. According to Your reckoning assign a number to every risk regarding the total number of risks in each category. For Example:

(1) Cultural

(2) Governmental, if you consider risks which are an outcome of cultural differences more severe than risks stemming from Governmental policies.

<b>OFFSHORING</b>	<b>DOMESTIC</b>
<p><b>1. Geopolitical (1 – 15)</b></p> <ul style="list-style-type: none"> <li>( ) Hostile nation</li> <li>( ) Governmental</li> <li>( ) Regulations that discourage foreign business</li> <li>( ) Terrorism</li> <li>( ) Legal protection</li> <li>( ) Technological advancement of the country</li> <li>( ) Legal (law) regulations</li> <li>( ) Cultural</li> <li>( ) Language barriers</li> <li>( ) Geographical Distance</li>   <li>( ) Worker union opposition</li> <li>( ) Industrial spies</li> <li>( ) Standardization</li> <li>( ) Visa laws</li> <li>( ) Rigid custom laws</li> </ul>	<p><b>1. Geopolitical (1 – 5)</b></p> <ul style="list-style-type: none"> <li>( ) Location</li> <li>( ) Worker union opposition</li> <li>( ) Industrial spies</li> <li>( ) Legal protection</li> <li>( ) Legal (law) regulations</li> </ul>
<p><b>2. Economical (1 – 7)</b></p> <ul style="list-style-type: none"> <li>( ) High tariffs on import and export</li> <li>( ) High exchange rates</li> <li>( ) Vendor becomes a competitor</li> <li>( ) Opportunistic behaviour of IT supplier</li> <li>( ) Currency fluctuations – unstable currency</li> <li>( ) Inflation</li> <li>( ) Economic Crisis</li> </ul>	<p><b>2. Economical (1 – 4)</b></p> <ul style="list-style-type: none"> <li>( ) Opportunistic behaviour of IT supplier</li> <li>( ) Inflation</li> <li>( ) Economic Crisis</li> <li>( ) Vendor becomes a competitor</li> </ul>
<p><b>3. Strategic (1 – 11)</b></p> <ul style="list-style-type: none"> <li>( ) Market volatility</li> <li>( ) Lack of understanding of customer need</li> <li>( ) Under-delivery(work completion time)</li> <li>( ) Incomplete contracting</li> <li>( ) Power asymmetries between supplier and client</li> <li>( ) Maturity, experience and expertise levels of supplier</li> <li>( ) Transfer of knowledge to supplier</li> <li>( ) Loosing of knowledge</li> <li>( ) Expectations</li> <li>( ) Different strategies</li> <li>( ) Loss of control over internally generated IT</li> </ul>	<p><b>3. Strategic (1 - 10)</b></p> <ul style="list-style-type: none"> <li>( ) Lack of understanding of customer need</li> <li>( ) Under-delivery(work completion time)</li> <li>( ) Incomplete contracting</li> <li>( ) Power asymmetries between supplier and client</li> <li>( ) Maturity, experience and expertise levels of supplier</li> <li>( ) Transfer of knowledge to supplier</li> <li>( ) Loosing of knowledge</li> <li>( ) Expectations</li> <li>( ) Different strategies</li> <li>( ) Loss of control over internally generated IT</li> <li>( ) Relationship between supplier and</li> </ul>

<p>( ) Relationship between supplier and contractor</p> <p><b>4. Operational (1 – 17)</b></p>	<p>contractor</p> <p><b>4. Operational (1 – 13)</b></p>
<p>( ) Relationship between supplier and contractor</p> <p>( ) Incomplete specifications</p> <p>( ) Productivity of personnel declines</p> <p>( ) Personnel opposition against outsourcing</p> <p>( ) Inability to measure performance</p> <p>( ) Control of process</p> <p>( ) Security and information vulnerability</p> <p>( ) Human resources availability</p> <p>( ) After service (post implementation)</p> <p>( ) Client support</p> <p>( ) Incidence response capability</p> <p>( ) Personnel background check</p> <p>( ) Personnel security</p> <p>( ) Quality of personnel and work</p> <p>( ) Rogue employees</p> <p>( ) Hackers</p>	<p>( ) Relationship between supplier and contractor</p> <p>( ) Incomplete specifications</p> <p>( ) Personnel opposition against outsourcing</p> <p>( ) Inability to measure performance</p> <p>( ) Control of process</p> <p>( ) After service (post implementation)</p> <p>( ) Security and information vulnerability</p> <p>( ) Client support</p> <p>( ) Incidence response capability</p> <p>( ) Productivity of personnel declines</p> <p>( ) Security and information vulnerability</p> <p>( ) Quality of personnel and work</p> <p>( ) Hackers</p>
<p><b>5. Technological (1 – 5)</b></p> <p>( ) Loss of developing methods (security of code)</p> <p>( ) Data confidentiality and security</p> <p>( ) Lost of control over authentication and network perimeters</p> <p>( ) Network complexity</p> <p>( ) Technical change (short technology life cycles)</p>	<p><b>5. Technological (1 – 5)</b></p> <p>( ) Loss of developing methods (security of code)</p> <p>( ) Data confidentiality and security</p> <p>( ) Lost of control over authentication and network perimeters</p> <p>( ) Technical change (short technology life cycles)</p> <p>( ) Network complexity</p>

## Appendix C – Results of questionnaires

Results for Geopolitical risks:

<b>Geopolitical risks</b>							
	<i>Interviewee A rating</i>	<i>Interviewee B rating</i>	<i>Interviewee C rating</i>	<i>Interviewee D rating</i>	<i>Interviewee E rating</i>	<b>Sum</b>	<b>Final rating</b>
<b>Offshore</b>							
Cultural	3	2	3	2	4	14	2
Geographical Distance	1	1	4	4	1	11	1
Language barriers	2	3	2	3	5	15	3
Governmental	7	4	1	5	7	24	5
Legal (law) regulations	11	11	5	7	6	40	8
Standardization	12	12	7	11	9	51	11
Rigid custom laws	6	7	11	8	13	45	9
Regulations that discourage foreign business	10	10	10	9	12	51	10
Technological advancement of the country	8	8	6	10	8	40	7
Visa laws	9	9	14	12	14	58	12
Industrial spies	13	13	12	13	10	61	13
Legal protection	4	6	13	6	2	31	6
Hostile nation	14	14	8	14	15	65	14
Terrorism	15	15	15	15	11	71	15
Worker union opposition	5	5	9	1	3	23	4
<b>Domestic</b>							
Location	1	1	3	1	5	11	2
Worker union opposition	2	2	2	2	2	10	1
Law and legal regulations	3	3	1	5	1	13	3
Legal protection	4	4	5	4	3	20	4
Industrial Spies	5	5	4	3	4	21	5

Results for Economical risks

<b>Economical risks</b>							
	<i>Interviewee A rating</i>	<i>Interviewee B rating</i>	<i>Interviewee C rating</i>	<i>Interviewee D rating</i>	<i>Interviewee E rating</i>	<b>Sum</b>	<b>Final rating</b>
<b>Offshore</b>							
Currency fluctuations - unstable currency	3	3	4	4	5	19	4
High exchange rates	5	4	6	6	3	24	6
High tariffs on import and export	4	5	5	7	7	28	7
Vendor becomes a competitor	6	1	1	5	2	15	2
Opportunistic behavior of IT supplier	7	2	2	2	1	14	1
Inflation	2	6	3	1	6	18	3
Economic Crisis	1	7	7	3	4	22	5
<b>Domestic</b>							
Vendor becomes a competitor	3	2	2	3	3	13	3
Opportunistic behavior of IT supplier	4	1	1	4	2	12	2
Inflation	2	4	3	2	4	15	4
Economic Crisis	1	3	4	1	1	10	1

Results for Technological risks

Technological risks							
	Interviewee A rating	Interviewee B rating	Interviewee C rating	Interviewee D rating	Interviewee E rating	Sum	Final rating
<b>Offshore</b>							
Technical change (short technology life cycles)	5	4	5	4	5	23	5
Loss of control over authentication and network	4	1	3	5	4	17	4
Network complexity	3	4	4	1	1	13	3
Loss of developing methods (security of code)	1	5	1	2	2	11	1
Data confidentiality and security	2	2	2	3	3	12	2
<b>Domestic</b>							
Technical change (short technology life cycles)	5	5	4	3	5	22	5
Loss of control over authentication and network	4	2	5	5	4	20	4
Network complexity	3	4	3	4	2	16	3
Loss of developing methods (security of code)	1	1	1	1	3	7	1
Data confidentiality and security	2	3	2	2	1	10	2

Results for Strategic risks

Strategic risks							
	Interviewee A rating	Interviewee B rating	Interviewee C rating	Interviewee D rating	Interviewee E rating	Sum	Final rating
<b>Offshore</b>							
Market volatility	11	2	2	6	2	23	3
Lack of understanding of customer need	2	7	11	1	3	24	4
Under-delivery (work completion time)	10	5	3	7	6	31	6
Incomplete contracting	8	8	6	2	11	35	9
Power asymmetries between supplier and client	9	11	8	9	8	45	10
Maturity, experience and expertise levels of supplier	5	6	4	8	4	27	5
Transfer of knowledge to supplier	1	1	7	3	1	13	1
Loosing of knowledge	6	3	1	4	5	19	2
Expectations	3	9	5	5	10	32	7
Different strategies	4	4	9	10	7	34	8
Loss of control over internally generated IT	7	10	10	11	9	47	11
Relationship between supplier and contractor		12	12	12	12	48	12
<b>Domestic</b>							
Lack of understanding of customer need	9	7	2	8	7	33	7
Under-delivery (work completion time)	4	1	1	9	2	17	1
Incomplete contracting	1	4	7	3	5	20	4
Power asymmetries between supplier and client	10	6	10	7	9	42	10
Maturity, experience and expertise levels of supplier	7	10	5	10	8	40	9
Transfer of knowledge to supplier	3	2	6	4	4	19	2
Loosing of knowledge	5	3	3	5	3	19	3
Expectations	2	5	7	8	1	23	5
Different strategies	6	8	4	6	6	30	6
Loss of control over internally generated IT	8	9	9	2	11	39	8
Relationship between supplier and contractor		11	11	11	10	43	11

Results for Operational risks

<b>Operational risks</b>							
	<i>Interviewee A rating</i>	<i>Interviewee B rating</i>	<i>Interviewee C rating</i>	<i>Interviewee D rating</i>	<i>Interviewee E rating</i>	<i>Sum</i>	<i>Final rating</i>
<b>Offshore</b>							
Incomplete specifications	10	2	2	13	7	34	5
Inability to measure performance	2	8	5	10	12	37	6
Control of process	6	3	1	3	2	15	2
Relationship between supplier and contractor	1	1	9	1	1	13	1
Dependency	7	7	7	6	5	32	4
Security and information vulnerability	8	12	6	2	10	38	8
Human resources availability	11	13	13	14	8	59	12
After service (post implementation)	5	16	14	4	11	50	11
Client support	9	17	8	16	9	59	13
Rogue employees	14	15	17	9	15	70	16
Hackers	17	14	16	15	17	79	17
Personnel background check	16	5	15	11	16	63	15
Personnel security	15	4	10	17	13	59	14
Incidence response capability	1	6	3	8	4	22	3
Quality of personnel and work	3	10	4	7	14	38	7
Personnel opposition against outsourcing	12	11	11	5	3	42	9
Productivity of personnel declines	4	9	12	12	6	43	10
<b>Domestic</b>							
Incomplete specifications	4	5	7	11	6	33	7
Inability to measure performance	1	10	13	8	1	33	6
Control of process	9	8	3	1	2	23	2
Relationship between supplier and contractor	2	3	1	7	5	18	1
Dependency	7	7	4	12	10	40	8
Security and information vulnerability	12	2	5	10	11	40	9
After service (post implementation)	3	4	11	9	3	30	5
Client support	5	12	2	6	4	29	4
Hackers	13	13	13	13	13	65	13
Incidence response capability	11	11	9	4	8	43	11
Quality of personnel and work	8	9	12	5	9	43	12
Personnel opposition against outsourcing	6	1	8	3	7	25	3
Productivity of personnel declines	10	6	10	2	12	40	10

## Appendix D – Interview Transcripts

### Interviewee A - Peter Svenburg (CIO Trelleborg AB)

Interview duration 70:34

PS Peter Svenburg

KM Konstantinos Mertzianis

TG Tomasz Gidzgie

PS: ...That didn't exist in my time

KM: yeah because now globalization is like...

PS: yeah yeah

KM: and that's the main reason of our topic with outsourcing and offshoring and all that stuff

PS: I have two youngsters starting off now in Lund in October and both of them were initially inclined of going abroad immediately.. and I tried to persuade them... for studies

KM: for studies abroad? But why? Lund...

PS: yeah that's what exactly why I said. I said start-up... but you know for a Swed it's always greener on the other side

KM: aha

PS: the grass is greener on the other side. So I tried to convince them that it's better to start off in...

KM: ...in your own country

PS: yes and then there are possibilities of the... cause otherwise you have to pay; I mean if you go to London or you go to...

KM: yeah I was accepted also in a school, a University in London but I chose Sweden. So...but the thing with London is if you want my advice for your children it has become too much commercial. It's like everyone goes there to...especially from my country, every Greek goes to London to do their Master. It's like do something different and there 're...

PS: Exactly and there is... I mean... not to go along with the stream

KM: yeah

TG: I've been here now for 5 years

PS: you say... It sounds like you have a Polish name

TG: yes I'm Polish

PS: yeah

TG: my step-father is, not my real, my step father is Swedish I just came here 5 years ago...

PS: yeah..

TG: ok so (we have coffee)

PS: should I start giving you a very brief, I have an hour...

KM: yeah we wil...

PS: I will give you an overview of Trelleborg to put this into some kind of context

TG: Yeah..

KM: and If you want your like background in this company like what do you do...

PS: hmm, yes yes

TG: how do you work and what are your previous experiences

PS: I mentioned already that I'm not an IT professional from origin.

KM: yes

PS: I was more inclined to go the legal way and I started off after the exams as a Judge; we have a very special system here in Sweden eh, if you want to go to the court route you start off almost and directly after you legal exam; as a clerk more or less for six months and then you go up in the grade; so eh... I was working as a judge in one of the district courts Hovrattena we say in Swedish in Gothenburg and eh... but came to the conclusion that I wanted to see something out there in reality so, on the other side of the board, so I went out and after some rounds I ended up as a company lawyer in a group that does not exist anymore at least not under that name it was... that time it was in cement industry, it was

called Europe later Scancem and then it was inquired by Heidelberg Cement which is largest building material supplier worldwide today. So I started off as a company lawyer and you know you have the possibility to with a legal degree to widen your perspective and so I got tired of always being limited to be an advisor as a lawyer you cannot decide to take business decisions, you just advise and then the others take decisions; and so I got frustrated and then I was offered to go over as a treasurer and I took the chance so I worked for a couple of years in that area and then they sent me abroad and when I came back I was appointed executive vice president on a sub-group of companies with responsibilities among others including IT and at that time, this goes back... we are now in the end of 1980 beginning 1990. I was quite criticize there was no IT strategy put on the table and everybody did what I wanted to so when they came in new chief executive in they said you who have such a lot of opinions and this you better come take care of it, so that's how I ended up in IT.

TG: Here in Trelleborg? Yes?

PS: No, not Trelleborg, cement industries

TG: a ok, ok.

PS: so I didn't know... my perspective at that time perhaps not an end user perspective cause I had the professional responsibility in that group but I didn't know very much on technique so I had a user or management perspective on IT so I became the first CIO in that group and when eh... And then I started some initiatives in order to get things in order, to get a structure. I built up a group central IT function which was tough cause traditionally the hole governance was very decentralized so it was some years of fighting and eh, explaining and persuading and then when the group was bought by Heidelberg Cement they picked me down there at Heidelberg so I became the CIO of the new Heidelberg group and actually with the mission to do the same as I did in the former group and that was even tougher cause it was much more multicultural I mean Heidelberg is really global and at that time it was 40.000 clients eh...desktop in the environment so it took a little bit longer and when I was ready with that now we are in the end of 2006 they came and said Svenburg now it's time to consolidate the ERP site, SAP site; I said it's an excellent idea but you have to do it without me cause I had been traveling back and forth, I still have... I commuted actually down to Germany, I had my family still here and I was tired of it and I had decided to stop with IT so I said you should do but with someone else and I left and when I came back here in Sweden the only thing I knew is.. that time I didn't want to continue with IT but during these processes I've been through I got attracted by... what you call it... leadership issues; developing people and working, get people to work in the same direction and so on; so I joined a small consultant team specializing in that area and already after one month Trelleborg called because the Chief Financial Officer here was at a certain time doing a very limited time Chief Executive at Scancem so we got to know each other he followed my projects and so on and what had... what the situation in Trelleborg now eh... in 2006 was that Trelleborg is an extremely decentralized organization; business is owned by the local business units.

TG: oh, so you don't own actually the...

PS: I didn't at that time and eh... this is a result of the way the group has developed. I mean Trelleborg today is not what it was 10-15 years ago. There has been tremendous and a lot of changes and the new Trelleborg is a result or a consequence of a number of acquisitions. They have bought companies and every time they bought a company what did they get with it? An IT organization. Eh.. and there was no ambition to harmonize or anything for everybody continued in their own direction and then eh... they had of course a Chief Executive Officer not because they understood what they should do with a Chief Information Officer but more for the sake that a group of this size should have a Chief Information Officer and they did not define clearly what the function was supposed to do and the result of that was that it created an enormous polarization between the group IT level and the business area level and in its turn the business unit. Group IT thought they were in control and that was not accepted by the business area IT managers; we have 4 business areas and each business area have 100-150 business units; so there was a lot of, ehm... fight going on between the business levels and the issues ended up on the table of the Chief Financial Officer here, he got fucked up by that, talking plain Swedish, and eh... so he said what the hell should I do and then our path crossed again and they invited me initiatively to be a speaking partner to the board here and then some unexpected things happened and I

ended up as the operational CIO, so this was end of 2006; and I started first with a very overall analysis of the situation; went out and talked with the business people, talked to the IT people and it was quite clear for me that I mean, if we want to secure that IT is a well functioning support process for the businesses couldn't continue like they had done before, cause everybody was doing the same thing but in parallel; it means...

KM: ... like coordination?

PS: no coordination, it means a lot of duplication cause you have to have people everywhere for the same tasks although they can work for a larger scope they work for that small silo and what I call of "fragmentation" it means that if you are in a small location and perhaps have 5 people you have to distribute all the IT tasks in those 5 people and they will never be in position to specialize and in IT they work 5% with messaging, 10% with server hosting and really never got on a high competence level. So I realized immediately that if it's the same bloody thing I have to do again; consolidate and to a certain extend centralize... but due to then the historic tradition here in the group sack, ehm.. they were a little bit reluctant in the board, they said it sounds great what you are saying and conceptually you are right but without governance you have to convince local IT on this direction work together with them, and what they actually said was you have to reach consensus and I was quite doubtful eh... but I said ok I give it a chance so between 2007 up to December last year we forced a direction; we had achieved a lot of things, we had created a common active directory environment, we had defined a standard client but ehm.. number of other examples if I should be very frank most of it, most of the results ended up at PowerPoint level.

KM: oh, ok

PS: when we went out into standardizing those clients they started implementing but very slowly and I found out after a while that If we continue with that speed it would take 10 years before it sell, we have 10.000 clients, 25.000 employees, 10.000 of them are desktop; and I was only in position to do the things were I succeeded to get a consensus. So it means that I couldn't drive this very systematically, this change process; cause it is a change process, it's not technical project it is... it's hard to deny that it is an IT project but it is a main change process cause also the user community have to change and adopt to new way of working. So now we are up at December last year. What then was good for me was the financial crisis...

KM: oh...

PS: ...cause earlier they said: how much is the IT spending? I said I don't know, for that I don't have control of it but my guess is between 1 and 3 percent of sales, and sales is 40 billion. And they said 1-3%?... we have other problems much more bigger. So I didn't get their attention for the ideas of a more controlled centrally govern process. But then it comes the financial crisis and at the same time this is... So I got a clearance now and eh.. we have set up a program, we're not going into detail on that, but it's a program but it's a program that will last up to 2011 and then I will go out and play golf... I have given up my ambition of being a professional but anyhow, play golf; This is a timeframe I have, we are in this situation of... then to link it to your scope here...

KM: yes

PS: sourcing, I am a traditional outsourcer cause that is what I've done both in Scancem and Heidelberg Cement eh... but I think...

TG: you can, sorry that I interrupt, if we can start with your experiences which date from '90s because we also want to take some notes of history

PS: yes, I mean... my first outsourcing experience was back to 1969... no! sorry '89

KM: it was inshoring inside Sweden or...

PS: well we, I mean Scancem group was also international eh... we were spread around the globe eh... we had our emphasis on the Nordic countries but we had operations in Africa, in Asia, in Americas... so we had an international approach for that outsourcing; at that time it was all about very basic infrastructure, cause in Scancem it's little bit like same in Trelleborg the ERP site is not actually owned by IT, it's owned by the business represented by the controllers

KM: in Scancem?

PS: no in Trelleborg.. So the outsourcing experience I got in '89 was limited to basic infrastructure, wide area network, LANs, messaging environments, that's what existed at that time

TG: yes

PS: So, we went out and did this very thoroughly and formed requests for proposal and we addressed big number of potential candidates internationally but we ended up with a Swedish contract not because it was Swedish but because of other things

KM: aha, risks, you consider risks?

PS: yeah, but you know going back to 89 you didn't talk very much; when you talked about IT risks at that time it was viruses

KM: ohh, ok

PS: You didn't realize the other risks then

TG: did this company from Sweden provide the services for you to manage the communication with Americas or...

PS: they contracted subsuppliers from international sites. Eh... It is no secret, it was a company at that time was called WM-Data now it's part of the Logica unit. But eh, it was quite an easy process to get an acceptance for the outsourcing cause you have to remember this is back in '89, it didn't, well it said IT but we still called it ADB; and the functions that we outsourced did not really exist internally earlier, we had a mail system, but it was a number of enthusiastic users that set it out; so this is back in antique times, so it was quite easy to get an acceptance for outsourcing cause it was something new, it meant something new for the users, for the managers, they got a professional messaging system, electronic calendars and possibilities to remote access to their resources when they were traveling...

KM: but then you didn't consider...

TG: it a risky process

KM: for example now they have systems building risks just for that purpose

PS: no at that time it was not on the table, of course I had discussions with the risk manager of the group but that was more related to insurance; who owns the assets and can we recover that by our insurances and so; and you know it was not very critical either at... this was a period of time where we were faced an... sometimes quite heavy virus attacks and it didn't matter if the messaging system was down few, three, days, we even had an example when we were down 8 days and the business survived

KM: so it wasn't such a problem..

PS: it was good to have but not critical

TG: ok..

KM: so It worked well?

PS: it worked well and we were very satisfied with the services provided by the end of that time of course you always complain and you always have the difficulty to see all the problems when you write the contract; although I'm a lawyer you never get a full covering agreement, there always pops up things and you know this as well as I do as you have studied this but when they go out and quote you, eh... I mean they see to it at... that is not an additional services coming in which is not covered by the basic fees; cause in order to get the deal you have to go down pricewise and then they see to it that they get financially coverage through extra jobs and...

KM: we also have a previous example from another company that they had signed the contract like that and they stuck to a sentence and this sentence caused three years, malfunctions to the networks and three years to the court.

PS: yeah, yeah

KM: only a sentence through this big pack of SLA, for example

TG: speaking of that how aware are you of the "winners curse"; cause they say you have to go down this price with the supplier and usually what you find in the literature is the problem that they want to win the contract and then they have problems of providing the services. Did you...?

PS: and that was exactly what happened

TG: ok.

PS: so it is the only example in my life so far where I have given notice, termination of a contract for the purpose of paying more. Cause I realized that they went down too far so they could not allocate

enough resources to meet the service level objectives. And this was a fault of the purchasing director at that time cause we didn't do negotiations and we came to what we thought was a reasonable level, then according to the governance principles in that group, at that time the purchasing director comes in at the end just the minute before you are supposed to sign and then he pushed the price down to 20%; you will not get a deal unless you cut 20%. And those poor bastards, I mean they couldn't do anything else so they cut but it meant that they couldn't deliver properly. So after a year or... yeah after a year, I accepted that we should pay more and then it went very well. I had some internal difficulties explaining why I took the initiative to pay more...

TG: yeah

PS: ... so eh they thought it was crazy to offer an increased prizing for that represented by the hardware but it went well and then when I came into Heidelberg Cement eh... with an ambition to run similar consolidation centralization processes, sourcing was of course one of the basic questions, how should we source; And I don't know how familiar you are with the German culture but at least in that part of Germany where Heidelberg Cement resided, they said outsourcing! Outsourcing is something you do when you are forced cause you can't manage it yourself

TG: oh, ok

PS: Cause they didn't understand the strategic aspects of it at all, eh I realized very early that yeah I can run this internally with an insource setup but there wouldn't be much time for my golfing and I will most probably die in a heart attack! So for me I saw the outsourcing option as moderating the whole centralization and consolidation; bringing in an external partner, by that get rid of all the politM between the different parts of the group but it was not possible to do that upfront like that so in that process I started really from scratch with the sourcing analysis

TG: mhm

PS: and in order to get to credibility as there was a lot of fighting, everybody was questioning what I was saying and they wouldn't give me numbers and if I got numbers, they blamed each other for giving false numbers and so on and so on. So I brought in an external sourcing consultant company. A small English company called Orbis they are not very well known but they consisted of a number of former CIOs. So we collected a lot of information and did a lot of analysis and the result of that analysis was that the outsourcing route was preferred.

TG: and you did with a German company or you went here, or to offshoring...

PS: no we went internationally, but before we went out, you know in a German company the closest you can come to God is what is called Vorstand. Vorstand is a mix of board of directors and senior management committee. So they said well we can't argue against your figures and your argumentations sounds ok but, but we are still are still very hesitant to outsourcing. So you have to prove by providing guaranteed actual figures that this will save costs for us cause it was very cost prone at that time and I said well if you want 100% guaranty the only way I can get that is to to do contract, come up with a contract proposal where the provider already has signed it and then it's up to us to see if we are happy with the cost and the savings, then we sign; and they said yes do that. So eh I went out in an ERP process and we went out internationally there, we had all the big players; as Heidelberg was even much more global than Skansem it was not possible to go to German companies or... cause we need to have international coverage, so we went out to... see if I can remember them now, eh HP, IBM, EDS, Siemens Business Service – they don't exist any longer, but SBS they were called, Logica...

TG: mhmm

PS: eh... what's the name of the Philips former IT department? Atus, Atus origin

KM: but all these companies were situated in Europe? Locations like, where locations were your working hours, is their sleeping hours

PS: yeah but they had, they all had an international coverage

KM: oh

PS: they had satellites out there and that was one of the main prerequisites, they should have a full 24 hours global time zone coverage

KM: It's one of the most important factors when outsourcing really far away

PS: exactly, exactly

TG: How was the risk considered by them?

PS: We... I would say that we had a, we got a risk assessment manager into the project from the beginning

KM: only for outsourcing?

PS: for outsourcing, yes. So that was, I mean that was really, really considered well, it worked well. I had a Greek, I had a finance manager coming in from the beginning, eh a legal eagle coming in, HR coming in, so I really got support from high level, all those supporting processes and eh... so we went out, as Germans are very thorough we had to do everything very thoroughly. My intention at that time was to buy something out/up from a functional perspective. With that I mean I had no interest whatever to decide upon server structure and choice on messaging system, so, I wanted the functions.

TG: mhm

PS: how they provided it, it was up to them; if they could show it was secure and risk limiting. But as long as they could do that to a proper price they had to do it in time setup. Cause at that time I mean, when I had been out in the business preaching about this, myself I said that this area we are talking about late it was not let's say excluded. This is generic, it's commodity today, the users are happy as long as they can send and receive mail, they don't have to bother about the technique behind; eh... we should have a demand functional internal which should decide, which functions and on which acceptable risk level we want to sell the system but they do the technical design. So I said to all these, I think it was 10 companies, we want you to take this project from your shelves; you have done this for a huge number of other companies, you have must have run a standardization process in that respect so we except, show us it works, that it's secure, it's cost efficient then we buy it. So take it from your shelf and they all said "yeah we have it!" but that was the first disappointment, it turned out that no one of these big players had it. When we short listed them and finally we ended up only with one, that was HP, it turned out that we had to seat in and join in design, discussion and so on; so it took 2 years. And eh I learned a lot from that journey but it was quite a heavy process; eh... especially the risk side was heavy but also the staffing side, to manage, it was in 40 different countries; we had to have consultancy processes with unions in 40 countries and the rules differed and so on

TG: mhm

PS: eh... so we ended up with the contract proposal and Vorstand said Yes, proceed, this is a very sad story, eh... one week before the transition was to take place and the transition I mean when HP was supposed to take over our employees, take the control of our assets and so on, I had arranged a, more of a courtesy, meeting between HP's Europe top manager and one of the Vorstand members. And what I didn't know then what that... at that time 245 internal staff had got a new contract through HP.

KM: hmm, oh

PS: Everything was ready. What I didn't know, took place that week, was a hostile takeover of Heidelberg Cement. That came in an old traditional German industrialist, the guy who threw himself in front of a train in the beginning of the year Dr. Arl Adolph Merkle and when we were seating there the Vorstand member just announced that sorry we are not doing it and at that time HP had 140 people fulltime involved in this project; they had relied on the situation, they didn't have a formal contract yet, but we had issued a number of letter of incenses. So it was a shock, for them and for me. So we came in a rather strange situation we were not allowed to communicate at anything, to our people, it was as said put on hold, eh... then after a fortnight when the new chief executive had come in and the new finance director they confirmed that they are still interested in the centralize approach but they wanted me to turn the ship around and insource everything. So after the first shock eh... I was younger at that time, it was 4-5 years ago, I was like this Russian dog if you turn them around they go up again; so I realized that I can use a lot of the things that developed with HP, the hole production...

TG: and wasn't there any privacy problems? If you go to our risk..they develop something they...

PS: off course...

TG: where they're claiming that...

PS: I mean we, we had eh, we had eh, given a lot of information to HR...

KM: so the process, the IT process was strictly secured?

PS: yes, to the extend it is possible; I mean they had signed a lot of non disclosure agreements and the design we did eh, was secure, I think quite properly, although we were to be integrated in HP's global infrastructure; eh... there was efficient board set up, eh... we should have a separate AD forest and there were limited number of people with very well defined access to what, eh we had spread the, the authorities, we had eh good segregation of authorities among different people, so... but of course in the situation we ended up we were exposed...

TG: yes

PS: but I mean HP is a responsible company. They know if they do something wrong they're out of the market. Of course they tried to milk up some damages and so on because they broke into process but there was nothing coming out of that risk actually; but what I did I took the hole output of the process with HP, you know you discuss a lot of governance issues in an outsourcing, who should do what and what kind of partnership until that time; So I could reuse the hole demand side. What I had to add was the production and delivery part, and I stole a lot from what we had developed together with HP so we set up a center in Czech Republic

TG:m hmm

PS: eh... so today Infrastructure services and services for ERP are done out of Czech Republic globally. Now they are 60.000 clients

TG: oh, ok, that is rather big

PS: So eh, that is how it's run, you have owners for different service elements, or part of services spread virtually around the world, but when they had developed something new or proved something they hand it over to operations, in fact that is done out of Czech Republic

KM: and why,why...Czech Republic

PS: because we had an empty cement plant, in a city called Mokra, not very far from Brno; and Brno has a very good University, technical University, so eh we thought that was a good place to be, the cost was low at that time, today it's almost the same

TG: hmm

PS: eh what we didn't know was that one month after we set it up IBM decided to put one of their centers in Brno and that increased several salary levels immediately

KM: yeah

PS: but it has worked out fine; eh... in order to... live up to the business case we made, we didn't really want the existing people to move over to Brno cause they came with their French salary level, American salary level, so on, so actually lots of people was made redundant and then we hired new people

TG: but as, but as Heidelberg

PS: yes, yes

TG: and...

PS: So it works quite well eh... ambition was to allocate as much as possible on a remote service delivery model with a high degree... we, we industrialized the infrastructure; a lot of automation; we still need people locally on site support but they were coordinated after one place using the same system, one central service desk that controlled everything which could escalate to higher levels and it's working well today and this is a model

TG: This is the model?

PS: I am applying now

TG: ok, it's the same...

PS: but there is a difference we are not going to have one physical location

TG: hmm

PS: for the central organization

TG: hmmm

PS: it will during a number of years be virtual

TG: so how important is the outsourcing unit now in Trelleborg now where you're working, how important is it?

PS: we are not there yet; I mean I've just started the process

KM: hmmm

PS: so now two years ahead

TG: ok

PS: but I've been able to get acceptance from the IT people, they understand eh, the first reaction is change, change is negative; I mean in my small silo I have control of everything and I do what I want, I do it well and I'm appreciated. Now they are thrown out, they are not questioned but they are challenged, they have to show that they can perform; but on the other side they will get into a much more professional IT organization, they will have the chance to specialize

TG: hmm

PS: to be educated further if they want to, have the possibility of doing a better career cause they are stuck out in the eh... Milano or wherever they are in a small unit; here they get colleagues and we will get money for the investment, we will create a modern IT environment...

KM: aren't you concerned that you might lose them?

PS: Yes I will lose some, I will, but

TG: so you are aware of that?

PS: I'm aware of it but I think that the risk is quite limited if I had the chance to talk to them before they react

TG: yes

PS: cause I know that I can, I can really show them the upside of this, for most of them there will be opportunities, of course there will be people that will be hit because in an industry like us if you go out on a small location, on a plant and look at the IT guy profile there it's very often so that it will, it's a guy has started in the plant, who has had an interest in IT and got the chance to take care of it and eh... we have a number of those people and they will of course, many of them will have difficulty to compete with the well educated IT staff; so there will be some people who will be hit but this will be on a two years period, so...

TG: for this process will you also use outsourcing now?

PS: there is eh..., I have changed my mind a bit

TG: ok

PS: I'm not so much in favor any longer of big bang outsourcing. You can call it multi-sourcing or mix-sourcing or whatever, I'm certain that there are certain services that can be provided much more efficient and cheaper by professional a outsourcing partner. Pick for example the messaging environment, I want to buy that as a service; because we have 10.000 users the potential partners perhaps have million mail accounts for a number of customers together and they can provide it as secure, cheaper and more efficient than we could do internally. But that put that responsibility on my future infrastructure, global infrastructure director; he is supposed, it is his responsibility to come up with the most efficient distribution between external contracting and internal production.

TG: so you might also use someone which is based in India

PS: yeah, yeah. I mean...

TG: so you have no objections against

PS: no ,no. You see eh...sorry I have this bad Swedish habit. Eh I think you have come across it.. hehe

KM: yeah

PS: it worked like that today but you're expected if you go to IBM or HP, DS whoever, they in their turn has offshored

TG: but the point is that if you as Trelleborg would seek for any special companies? For example in India or Philippines?

KM: not through IBM... just go directly there.

TG: or is that to risky?

PS: No, I'm prepared to do it but it could be pedagogically challenging to try to get an acceptance internally for it, because there is still this belief amongst many people that well you can't control the unit in India eh and so on; but you know if you look at the big players in India, I mean I'm not exaggerating now I have at least 15 phone calls every week from offshoring companies, mainly in

India. And its name I never heard of, and when they come here and present themselves they have 200.000 employees, they are huge

KM: yeah

PS: and they have become... they are clever, they have become more Europeanized in their approach towards me. They have offices in Sweden, in London and so on; so I don't see any difference between those big companies located in Asia compared to IBM or the others here in Europe group which go the other way; and you have to remember that we are quite big in Asia today. We have operations in India we are familiar with the Indian culture, we have our largest plants on Lanka and we have 14 plants in China, so we, we, we are there I mean, we are not afraid of their culture

KM: so you're just trying to persuade other people to go there?

PS: yeah I think from a cost perspective and from a competence perspective they are really good, very...

KM: but there are communication issues

PS: yeah

KM: and cultural differences

PS: yeah and time zone problems

TG: do you consider generally, if you do offshoring, do you consider it more risky than if you hire a Swedish vendor?

PS: no, no

KM: it's the same?

PS: it's the same, the globe shrinks

KM: and just the contract changes for example because for example India might have as a country different laws...

TG: yeah, they have actually, we learned that they have really legal protection rules which are not that strict like in Sweden for example

PS: yeah, exactly. But I mean we are used to that. We have been faced to that when we setup operations in India, when we have built plants in China, I mean you need to have local legal assistance and so on. I don't see it as a major problem actually

KM: oh

PS: It's a challenge but it's overcome

TG: So what problems...eh problems...what problems what risks do you see at first?

PS: with offshore?

TG: yes, exactly

PS: It is the communication and culture related issues of course; and then but apart from that it is exactly the same challenges you have when you contract IBM or HP or whoever; it is a problem, you will never be in position to foresee all the problems coming. It means that you will never end up with a full covering contract. That is very important to, in the contract build up a proper governance, structure, so you are able in a convenient and secure way to deal with the problems that pop up. You have to have an anchor in up, at top level in the partner company talking to your own top level here and you should have governance with reach in every level.

TG: hmmm

PS: that is a challenge to get that in place, eh... you'll never succeed, you think you'll do but after one year that pops up and just...

TG: Ok so even hiring a Swedish vendor, that's the main problem

PS: you have to see to it also that they grab a proper eh... consideration, that they get a proper fee

TG: hmm

PS: cause both this is, I don't know the English word of it, but this is like perhaps open go to an open goal, but it is important that both parties get something out of it. There is only one winner... it's a bad start. It is, it's a bad start. Then I mean a number of your aspects are very relevant. You have to understand that you give away certain control, you could lose your own competence in certain areas, eh... so I'm not in favor of big bang outsourcing. I have today contracts with India in certain limited areas; what has totally exploded here during the last two years is... what should we call it...

collaboration, collaboration solutions, work from collaboration and we are working on a Microsoft SharePoint platform

TG: but using an Indian vendor?

PS: yeah

TG: ok

PS: but also you know, I have my own developers in house but they can't handle everything so they do the more critical things internally and the more mass coding and so on we sent that to India

KM: ok so there you don't consider that this mass thing that you sent to India, it's not so important for the company's like, knowledge?

PS: no

KM: loosing knowledge

PS: no

KM: so there's no problem there

PS: I mean, I'm certain that it is of that nature that the individual guy seating doing the coding, it doesn't hit the full context

KM: hmmm

PS: he has his little part and we do up here and then we pull it together up here

TG: so in order to mitigate it you really limit the...

PS: yeah, yeah that's one part of mitigating the risks.

TG: what's the other part?

PS: the other part is of course to... well it's not easy

TG: like here what you have experienced here in Trelleborg? Both in Domestic, in outsourcing Domestically and come back in offshoring.

PS: we have touched upon it earlier, I mean it is very important that you put down real lot of effort in negotiations, in the contract; cause it's an investment worthwhile. If you run into things, rush into things you would be hit later on. Eh... and you also have to, to eh... we have when we talk about risk, we have what we call security baseline requirements and we have to see it that an external partner is winning and has a possibility to meet up with those requirements. Some of them are very detailed, eh... on some of the requirements we end up in the discussion, cause they say we can't do it; so either you except the adjustment or we have to drop out of the deal and then we go into discussions and we often find a compromise.

KM: but you don't have like some other companies that we interviewed they had this problem they said to us we cannot find it well with companies within Sweden, somehow, as you have problems. Imagine what will happen if a company in India...that's why they don't do that.

PS: what do you mean that the Swedish company can't?

KM: for example they have contracted or outsourced something here in Sweden in another company but they found problems that they were really difficult to deal with because of the small distance for example between Stockholm and Malmo, and they said imagine if we had done something like that in India... So we're not ready yet for the Swedish market, are we ready the "huge distance" market?

PS: I don't have an issue with that

KM: oh, ok

PS: perhaps I am to blue-eyed. Cause the physical distance doesn't mean anything today anymore. With all the communication and collaboration tools you have, initially you need to learn, to know each other, you need to meet, you need to seat down, you need to get some idea of the personality of the other side; but afterwards... I mean my ambition now with the eh... we call it TR.I.O, Trelleborg IT optimization, I like abbreviations

KM: hahaha

PS: Heidelberg it was highway.. I mean my ambition is to run as much as possible remotely and I don't mind if some of the tasks are performed internally by our American colleagues or our Brazilian colleagues. The technique is there today and it also enables time zone mitigation, mostly if you spread out. I mean for example the network, the LAN monitoring; we need to have people covering all the time zones, cause we are all in the same van.

TG: even the vendors from India they have access to the data?

PS: they will

TG: they will..

PS: you know if something happens with a router or any other active network component in India it will surely have an effect here; we had an outage we are running our wheels business area its eh using Movex, it was in the ERP,

KM: yeah

PS: eh system, and the whole plant in Lanka is fully depending on Movex and physically it is place in Bromolla outside Kristianstad

TG: yes

PS: with the vendor and what happened there was eh that we hadn't noticed they did some digging work and cut the cable and we had the redundancy arranged through our radio link we thought, at least we had paid for it but it turned out it didn't work. So the system was down for 40 minutes or something like that and the plant stopped in Lanka. So we are so integrated globally so the world is not so big anymore...hehe

KM: are you planning to eh put money on your own root, for example on communication between here the headquarters and India, like saying "this is my line"?

PS: no

KM: there is no problem if there is

PS: no... we have it technically, we have the tunneled solution, so we use Orange global network today, but within that we have our own virtual tunnel. So not even Orange can access our information

KM: because after reading some articles eh from professors and eh based on outsourcing there were some problems like network hacking issues from places like India

PS: yeah

KM: where they took the information and then

PS: I mean it would be foolish for me to say that there is no risk; of course there are risks. There are risks I mean you... even if I seat here and say today that we are up to 100% secure that's related to today situation, I mean what happens tomorrow, hackers become more and more skilled and new techniques pop up, so this is something you have to live with if you are not prepared to take any risk, you should not even play golf

KM: hehe

PS: cause you can get a golf ball in your head or... you can definitely not do business, certain risks there are

KM: and that means that you give money a lot of money in security?

PS: yeah. I've got a lot of attention and I've used security as an argument for the consolidation...

TG: but security you manage internally? You don't get a vendor?

PS: no I have, I have consultancy coming in, advising me and so on but we deal with it ourselves and eh, eh... I think this is the only way of doing it, I've touched upon it earlier, I mean you know this talk about no chain is stronger than the weakest link and therefore we have to have the same level of security in all our occasions even if it's only an office of two persons. From security point of view they have to meet the same standards as the big plant; and this... you can't really live up to this if you have a very decentralized environment, cause if we have in an office in Australia which is so small that they don't even have their own IT resources, they buy in from the street busy technicians whatever, it can never understand and meet the security requirements of the group. We have to control the process

TG: so the... and when you use those ERP systems for the plants there, there are also Swedish companies that provide those? Or...

PS: No, it's SAP mainly

TG: It's SAP mainly

PS: mainly but we had Movex also, and the small plants are using eh... it was earlier called Acccepta Microsoft, Microsoft Acccepta now the've changed it to DynamiM

TG: but this is also outsourcing?

PS: yeah... no, no we buy them

TG: ah you buy them

PS: we operate. Sometimes in difficult places the hosting

TG: hmm hmmm

PS: the servers place or whatever; but this will also change cause I mean no one is interested of having, eh having, I'm not interested at least of having my own data group. I buy... I buy space, I buy capacity, virtual capacity; if I can be happy with the security arrangements on it.

KM: that's the most important.

PS: yeah. We have another security aspect which we haven't talked about which is also very important the thing we call compliance. You know we are living in an increasingly regulated world, with a lot of regulations around anti- cartels, price fixing, market sharing; we are big supplier to... for military equipment, eh... to the space industry, to the plane eh... airplane industry and they have a lot of tough requirements from us, not as tough as the pharmaceutical area but still very tough; and we then have to prove for our customers that we can live up to those standards and we have to accept that they'll in certain situations will be able to get access to our internal information. In case of dispute or something like that and we also have the cartel authorities, routine commissions eh... state of, what is it called in United states... a similar commission. And they...

TG: antitrust?

PS: antitrust, yeah. They have the power of God and say that eh... we give you a supinum, meaning that you have within ten days to provide all the information you have in the group on a certain topic and that requires a lot from IT, we need to have transparency; where is all the information in the group, we need to be able to find information and we need to control who has access to that information they can come and ask we want to see a list of all the people who had access between 5 o'clock and 9 o'clock that day.

TG: How does it work then with outsourcing? How does it work?

PS: that is a part of this requirement proof for them, they have to live after that.

TG: oh, ok

PS: and they have to have tools for, for giving us a list of names, who was actually in there; these people have access of whom of them were actually in there and what did they do

TG: hmm

PS: and then you touch upon another issue the person integrity aspects and there is balance there

KM: or ethiM for example

TG: ok

PS: I get 2-3 times a month requests from local managers that they want to take part of employees mailbox or something like that, and we can't accept that for many reasons; I mean, relationship with the union, laws and regulations and there we have created a process where they have to go within the HR community, verify the need and then we do an assessment series without the partner and than we have the lawyers to...

TG: but given our list of risks, would you like to add something there? Is there anything that we didn't mention?

PS: Nah, I think the compliance issue

TG: the compliance issue.

KM: the compliance

PS: and with that I mean the risk of not being able to meet governmental regulations like antitrust eh... You know as soon as you have an operation that accepts payments with credit card you have to meet the requirements of the federation of the credit card issuer, it's not called like that but it is a federation.

TG: yeah

PS: they are very tough those rules

TG: hmm

KM: and especially eh... they need what they say "ISO"?

PS: ISO yeah

KM: and they are different in every country

PS: yeah

KM: So...

PS: so... we are certified ISO, certified; and that means that we have to be able to show

KM: yeah

PS: that we from an IT perspective live up to it. We have to eh... I'm basing my processes now on ITIL, you know this standard set of processes for infrastructure operations. And that requires also a lot of work to see to it that we use standardized processes cause I know if we use ITIL then we meet the requirements; cause it's their factors, yeah and then we meet the requirements. We had an issue and that's not a secret eh but I guess it's only those who have shares in Trelleborg that was interested but we had a case one or two years ago, two of our French management directors their operations was related to the production of hoses for the offshore industry and it's quite a competitive market and they acted contradictory to our internal instructions; they was engaged in some kind of price fixing, market sharing. They don't have to bother where to live for the next 2 years cause they are stuck up in some jail now in Huston in U.S but although it was not in line with our policy that was then in, on the contrary it was against it; we were hit as a company and we had been fined 10.000.000 SEK eh... from the European commission and we had great difficulties at that time to provide the authorities eh... I mean according to the instructions we really tried to cooperate fully, we made what you call in Swedish a pudel, do you know what that is?

TG: yeah, I do.

PS: lie down and say "I was wrong, sorry sorry", hahaha, we did that but we will anyhow find eh... but we found then that we had some gaps in our possibilities to find information and so. So even if we think, I think I have built up a good structure around this I will be faced with problems tomorrow or the day after but then you have to have a process to deal with it.

TG: ok and given the economic crisis do you think that...

KM: this is our last question...

TG: do you think outsourcing and offshoring will continue to grow

KM: for example now that it's new for Trelleborg and the economic crisis is one year now...

PS: no, we are hit, we are really hit because 30% of our sales is related to the automotive industry

KM: and the automotive industry got really hit

PS: well they have disappeared, I mean we even have negative orders, we have more cancellations than new orders, so it's really tough and eh... but we have good portfolio so automotive down still other parts quite up but it's beginning to hit there also; now automotive has flattened out a little bit, but now what we call industrial components that is, we deliver products for equipment in other plants, that is starting to be hit now

KM: and do you consider cost savings about those problems through outsourcing?

PS: yeah, if I speak not only for Trelleborg, that is one reason why we will see continuing outsourcing

TG: ok, so it will grow?

PS: yeah, I think so. But I think that we've all learned a lesson; 10 years ago we went into outsourcing deals without really understanding what it was we were outsourcing; we rushed into it cause we didn't foresee the problems and when you discuss outsourcing, today, internally or with other CIOs there are many who have a very negative view and say I have a number of examples where it went totally wrong, but that is because, you are now in the second row, today you see a number of 10 year old outsourcing agreements expiring and that was agreement cause that was bad quality. We have all learned that the contracts people are entering in today are much more qualified but there will still be examples of bad outsourcing as well as good

TG: yeah

PS: but I think it will grow; but I think that people have learned that they can't outsource the responsibility; they have to retain the responsibility and control. There is...

KM: and their knowledge?

PS: sorry?

KM: and their knowledge?

PS: knowledge... I don't think you have met EriMson but it's a quite famous case here where EriMson 12 years ago got rid of the... actually I don't think they retained more than couple, a handful of people internally they got rid of the whole IT department, outsourced it

KM: I don't know that

PS: eh.. and that was a decide, it was HPs, it was split between HP, IBM and Accenture and what happened was that when invoices started to drop in from HP, there was no one there who could understand what it was and HP was not happy because they want to have professional counterparts within the company to discuss it, but there was nobody left; so they, they em... stopped that renegotiated and came out came out better. That was 10 years ago, we have another example here I should have mentioned but it's a company on the west coast, quite big, with certain relationships with us, within manufacturing; we did exactly the same, they outsourced their whole infrastructure and technical services for ERP to a company which was not a traditional outsourcing partner; eh... but they wanted to be and the problem was that they didn't know what they had and what they wanted and the contracting partner they didn't put enough effort to find out through the internet and so on, they were also happy to get the deal so they just signed and that was stopped one year ago and now they are insourcing instead

TG: ok

PS: So that there will still be examples of mistakes but you learn gradually all of us.

TG: can you... do you do some check on the companies for example that you outsource to India, do you check them first

PS: yeah, yeah, oh yes

TG: you check them, so you have like policies

KM: do you also have some staff from here, Sweden, there?

PS: yeah, yeah I mean in the case now of the collaboration eh... that agreement and those activities are controlled by one of our sub-managers here

KM: ok

TG: ok

PS: we can't just hand it out. So firstly I said, you have to know exactly what you have eh... which you put in scope for outsourcing and you have to have a proper governance in place

TG: for the IT?

PS: yeah, and this relays not only to... now your scope is IT

TG: yes now our scope is IT, yes

PS: but we have made a mistake here that was three years before I arrived; we outsourced business processes around the country. It was exactly the same thing, we didn't have proper processes in place, then you can't outsource. You can't just tell a company please handle my accounting; you have to give them well defined processes, if you don't have that you have to develop it first together with them and then they can start the operations, otherwise it would be a fail.

TG: ok, right

PS: that is really important

TG: so yeah thank you for your time

PS: you're welcome, good luck! So you will eh produce some kind of paper here now

KM: yeah yeah

TG: the thesis

KM: thesis

## **Interviewee B - Åke Englund (Alfa Laval)**

Interview duration 36:06

AE Åke Englund

KM Konstantinos Mertzianis

TG Tomasz Gidzgier

KM: yeah.

TG: ... actually you're the last person we will interview..

AE: alright!

TG: you're the last..

KM: you're the eight..

TG: you're the eight person we are interviewing so... ok.. we need to..So...

AE: So, how long will be.. how much time we.. oh I forgot my phone (walks out of the room)

TG: Sure..

KM: About half an hour..

TG: half an hour..

AE: Ok, very good.

TG: If you need to leave earlier, it's ok.

AE: No, half an hour is no problem.

TG: We just try to cover everything. So, I sent you the questions did you have any time to..

AE: ...very quickly you have to make a refresh for me..

KM: Ok, no problem. The main thing we want, you after if you haven't done this, to fill up the..

TG: ...the questionnaire..

KM: the questionnaire..

AE: Ok..

KM: it is not a questionnaire it is just (a list), you put it in numeric order which outsourcing risks you consider more important..

AE: Mhm, ja..

KM: so can you start by telling us a bit about your background in general?

AE: Yeah, mhm, I have been working with a variety of different software applications with Alfa Laval since I started back in 86 but have been also in different companies so now I have been working with Alfa Laval since 97. And it have been.. ahm.. different kind of ERP packages that supports the typical processes that we run within the manufacturing industrial company a lot of integration has been all the time with the internal and external partners.. ahm.. Alfa Laval has a long tradition of being very decentralized company so we have had lot of different kind of packages spread in different warehouses, manufacturing sites and sales companies throughout the world, the demand to connect those systems has been very high for the... in the other days, so we started to connect the different systems, serv.. according to the processes they run, typically in the spare parts area where we have orders coming in, and the delivery should take place in maximum 24 hours no matter where it is, we have specific situations requirements, the marine business is very big for us and since ship is moving around, you really have to deliver the spare parts in due time, otherwise the ship has left the harbor so then we have to track where is it going to the next harbor and get there in time. So, delivery accuracy is extremely important and logistic processes around that are important for us. So in very much in these areas, traditionally industrial computing, industrial and systems.

TG: Mhm.

KM: So, as you say because Alfa Laval is decentralized, it's processes, so you deal with outsourcing? Eh...in general .. ?

AE: Yes, in general. You can say that since the millennium shift that the decentralization has changed and we are trying to merge things together again and it is a very long journey. We formed the central IT function called corporate IT where I am sitting and we have been also within the sourcing area, we have been very scattered around, we have been you know.. buying services and suppliers everywhere.

KM: Ok, so that is what we..

AE: Right, so we have tried to stop this journey by trying to get grip on our supplier agreements and which suppliers we would like to work with we have agreements with them and also after some time we will also start to try and package different kinds of services to get what we would actually like to hire things – complete service packages from external suppliers. So we have started to work with offshoring companies and variety of stuff, and we have actually we are still in the early days, so we have a quite long journey to do, to really have a strong and strategic sourcing strategy in place, but ah.. I have been involved in these four steps.

KM: As you saying early days, like only, how much time have you been in sourcing field?

AE: I should say that we have been actively working with the sourcing strategy in a couple of years..

KM: ... couple of years...ok..

TG: ok... yeah..

KM: ...and do you deal with IT?

AE: Yes.

KM: Or only business processes?

AE: Yeah, well, it have... it has mainly been according to services or applications around business systems or applications if you like... a... I have been involved in IT questions lately and that is aaa.. more or less..

KM: Because what we are interested in is only IT..

AE: Only IT? Alright...

TG: But ERP systems does also go into our field..

KM: That also goes to..

TG: But what is more important for Alfa Laval, it's outsourcing here in Sweden or offshoring to other countries... how does it ?

AE: That is the trick for us because we don't believe in just saying that we would like to go offshore with everything or we would like to do a hm.. nearshoring with everything, we have to find a kind a business case. We trying to find a, we tend to call it services, you know, package a certain kind of service we would like to buy from someone and then we go and see, can we buy it from offshore, or can we buy it from nearshore, what is the practical impact of buying things very close to Sweden or far distance to Sweden. Because some services that can be very, you know, piece and packaged and Europe have more like a commodity today that you can find in the market, there is a lot of suppliers that provide these services, the competition is there, typically it turns to be, that those services are better of buying from an offshoring company. Because it is a lot of... lot of cost pressure on those and really benefit is that you want to pressure the cost side..

KM: ...ok, that's..

AE: ... in some cases we would like to go outside and buy services due to the fact that we need to minimize the risk.

KM: Ah..

AE: ... or we would like to buy better competence because the internal competence are limited. So, it depends on case from case, why we would like to source things from outside. And also specially these days now when the equ... financial situation is very.. it's a lot of pressure. We have also to decide on a long term basis, what is the role for the Corporate IT, what is, we supposed to be good at and what services should be buy from other places. So it is also a kind a strategic decision around that.

KM: So, you try to mitigate the... or create a how can I say it, a list with the risks for offshoring and nearshoring in Europe for example..

AE: ..yes..

KM: ...you do something like that? Like generating such big..

AE: We trying to find, we started to draw some maps on EU, we trying to find, because Alfa Laval is a global company but we are not that extremely big company. Meaning that it is not so easy always to find an offshoring deal where we actually can save money, because typically we.... we are working actively with companies like InfoSys. InfoSys are giant companies, much bigger than Alfa Laval.

TG: It is a Swedish company InfoSys?

AE: Indian. Indian. Is one of the big ones in Indian.

TG: Aha, ok.

KM: Ah, and you outsource to them?

AE: We have outsourced different pieces through them, to them, and in their perspective they are used to work, you know with Coca-Cola, Shell Cooperation, and those kind of, you know giant companies, and Alfa Laval is small, and you can't really... it is hard to find a business cases where they actually can save money for us.

KM: Oh..

TG: Mhm.

AE: So, then you have another choice, then you should perhaps go to somebody else in Indian which are more on the same level Alfa Laval were, or you go to a Swedish supplier that might have an office in India. You try to find different modules because you can actually, there is a lot of hm... local suppliers that have these offers, that they can buy the service or they can deliver the service to us and they have perhaps one contact person in Sweden and then they have an office or a branch somewhere in India or other low cost companies, so the objective is to find the deal that the majority of resources should come from low cost side..

TG: Mhm... Eh.. what is the biggest risk in such situations when you do something, what You consider the biggest risk ?

AE: Its always ahm.. the biggest risk, you have to have in mind in my word, very clear definition on what kind of service you try to buy, because I have seen a lot of stories in the past where you actually think you will get something but the supplier has another view of what he should deliver. That is one thing and that is even more important when you go offshore.

KM: So, you try to mitigate that through special SLAs or special agreements?

AE: Right, yes, we are trying to be very clear on what we actually want to buy from, form the supplier, ahh.. in that way we are in a thinking, I do not know if you have seen other companies that have the groups that talk on this multisourcing concepts, I think that we all seen a bit of and trying to buy small packages of service, pinpointed to the service suppliers just to get clear grip on what we actually would like to ship on them, so that we are avoiding confusion and the other side, if you go offshore it is also the cultural side of it. And that is one reason for misunderstandings or misinterpretation of what...

KM: And the time zone, for example ?

AE: The time zone, can be a problem but not so big anymore..

KM: Not so big anymore..

AE: No.. because the companies you are talking to them are working 24/7 all of them..

KM: Ok..

AE: So, and that is also almost the request from us since if you should support Alfa Laval, I mean we have manufacturing plants in all different areas, so we need 24/7 or at least 24/5 I should say support from such a supplier. And that is.. it's becoming like a commodity to have this kind of a service.

KM: And do you consider like differences, that are our major issue here in our thesis, between risks involved in offshore and nearshoring, is there a big difference according to you in your experience, the risk factors?

AE: yyyy..

TG: Or even in domestic outsourcing like if you would buy a service from a Swedish vendor and you buy a service from an othe.. Indian vendor?

KM: Are the risks the same?

AE: No, they are different risks..

KM: They are different?

AE: Ah, one of the risks I have mentioned is the cultural side as well and language things actually is a risk. Which you shouldn't underestimate. We are working with Indian suppliers today and they speak grammatically perfect English but their dialect is impossible to understand we can't understand what they say, specially when we talk to them on the phone.

KM: Ok..

AE: So, if you write them an e-mail, or if you chatting with them no problem at all but you can't speak to them. And a.. that, becomes, you know, a major obstacle..

TG: Mhm..

AE: So the best examples we have with offshoring company is that when we have a person locally here, for instance in Lund that is some sort of speaking partner to us and he will take the discussion back home with the local colleagues down in India where... that is the best way to minimize ....

TG: ...the risk..

AE: the risk, yeah...

KM: And as you say, because you outsource IT processes, do you consider security issues? Because..

TG: What we mean is stealing the code for example.

KM: Because now when we talk about IT it is really easy to hack stuff from networks, specially in India. They don't have... they don't consider hacking crime as we..

AE: Noo...

KM: Do you have such issues ? Or...

TG: We've read that there are also some problems with law protection and with legal protection of the..

AE: Yeah, that is very.. I think that is from country to country. But in India particularly I think that is not a problem. But I think that if you go out to China that might be a problem because they have a completely different view on what is legal and not legal in that country. So that varies depending on where you go. And what it comes to aa.. security and hacking stuff...

TG: ...maybe on the other hand...

AE: ... we haven't really come cross that actually. But we have been also, I mean, so far we have been working with rather big companies and very very established companies and they have rather good protection against those kind of stuff..

KM: ah..

AE: ...at least as good as we have on ourselves. But... but..

KM: Is than an issue for you when you outsource..

AE: What we have... actually what we have had another situation with a Danish supplier..

KM: ...oh..

AE: ...that a we had a security issue with.

KM: Oh, can you tell us some stuff about that?

AE: Yeah..

TG: Not with details just, not with details, just what happened.

AE: What happened was that we signed a contract with a supplier around packaging and desktop management applications. You know, the management roll out and it was in the older days, couple of years ago, and we wasn't really that professional so we just find a deal that was concentrating on the task and so on and than we had, later on we had a problem with virus attack. We started to trace that, it ended up that the server that the supplier was running for us connected our network with the desktop management server which, you know, have access to everything. That was the most unprotected area we had. So we started an audit with them by that time and we realized that they didn't have any local protection at all and it was very bad shape and no virus protection and..

KM: So, you haven't considered that before going to them?

AE: We just took that fore granted.

KM: You took it for granted.. After that, do you consider (something)?

AE: Yeah.

KM: Ok..

AE: So that means that nowadays when we are starting up something, specially on the infrastructure side we will do an audit with the supplier... make sure that we can secure the.. in the contract written things but we would also do an audit to actually see that we can feel safe with the premises he is running..

TG: You do the same in India? Also an audit?

AE: Yes... yes.

KM: But you hire local people, local lawyers in order.. because.. aa.. legislation in India probably you don't have the knowledge here in Sweden to know it, so you hire local..

TG: ...people, audit people to check the company..

KM: ... audit people, to check that stuff or do you do it?

AE: We do it, that we do it with lawyers in England..

KM: Ok..

TG: Aaa..

AE: ... but I'm not an expert on this but I mean the contract is written with Alfa Laval Corporate meaning, I think that if there will be an issue I think it will be English, international law that the contract is written under. So the company will have to live up to that, otherwise they will go to court in..

KM: Europe?

AE:.. western... yeah somewhere there.

TG: Mhm.

KM: Ok.

AE: That's how I... I'm not a expert so I have to dig this cattle (?)

TG: No, no, that is interesting. How many offshoring or outsourcing deals you sign every year? It's a lot?

AE: Ahm... Can not say really..

TG: I mean..

AE: 5-10 but some of them aren't that big..

TG: Mhm. How important is then outsourcing and offshoring for You ?

AE: It's becoming more and more important..

TG: More and more important... but do you think it will grow in importance?

AE: Yes. What we will do now, is that we will.. we will try and be a bit more aggressive in the way that we not would like to buy an IT service, we would like to actually buy the whole process from a supplier...

TG: Mhm..

AE: ... so, let's say that we... let's say that we buy some infrastructure that might be a procedure around that infrastructure that we would like them to take care of, so that they can, so we can save some time and do some other stuff internally. Meaning that they should perhaps be responsible for aaa.. I don't know... negotiating with third line suppliers and they should take care of everything under some... some borderlines and they will have responsibility to report back to us, so we will actually put complete internal administrative procedure and buy the whole service package for...so... because that is the bent way for us actually to... to ... to... to ahm... not just to save cost but to save time. We need to... we are forced over this new financial situations to utilize out internal pro.. resources much more effective or efficient than before. So, and that goes also for management resources. So, we would like them to do more.. ehm... around these services that we buy, which also means that we would like to tha.. probably also would mean that we.. it would be even more long term agreements with the suppliers.

KM: Ok... and you said, eee about the financial crisis and you mentioned it before..

AE: ...mhm..

KM: ..how do you do with outsourcing and the financial crisis, is it good for you, is bad? Is it a way..

TG: Is it a opportunity to..

KM: ..a opportunity for you..

TG: .. to cut some cost?

AE: Aaah, it could be an opportunity you might see it because then we are forced, you know look at things with new wise it becomes... it becomes, you know in companies like this things get into aaa, let's say it becomes tradition how you do things and than you have some new situation coming up like this, this new situation came very quick then you are forced actually to change, you're forced to do something, there is the pressure, that is the good part of it, than the bad part of it is that it is sometimes painful but, but... yeah, I think it is good in the end. Specially because it has been, you know, we have

had good days for quite many years and that means that you, you know, you get I shouldn't say... I a way you get sad and happy because you don't have that pressure on you, everything, you know is... there is expansion going on all the time, more money is coming in and so on and then suddenly you have to consolidate and actually make sure that you are efficient and you are scrutinizing all the procedures that you run internally and so on, from that perspective it is kind a healthy to do it so, but for sure it's painful..

TG: But then you said that then you want to outsource whole processes but it also means that you will have to disclose a lot of information to the service provider. This is a risk? How do you deal with that? What information then will the vendor get?

AE: Yeah, it is a bit of risk ofcourse but that could also be signed in a contract that he has access to classified information so on, so that is also found in that we typically do with a legal contract so to say.

KM: That's how you did it?

AE: Yeah..

TG: And actually you are..

AE: I do not know whether is.. can I ask you if that's so ? That companies experienced...

TG: Yes.

KM: Yes.

TG: That's what we found quite a lot in the literature and the reading so that's actually the amount of the, the more information they were disclosing, so the many times, some companies took part of it. And they, on the basis of this information they provided their own systems for competing companies, so there is a company..

AE:... aha..

KM: We have found in the literature that the companies have lost a lot of money because they outsourced knowledge how it is called, and this knowledge, in some way the vendor took it...

AE: .. yeah...

KM: and they signed off and used it afterwards.

AE: Ok, are they, I mean are we talking about big vendors?

KM: Yeah, we are talking about.. I will tell exactly the example, it was about three years ago with Deloitte which is a quite a big company and they had outsourced in India. What happened is they outsourced a developing process and it was really strict and really easy so the developers in Indian got really bored because it was typical stuff and after two years or so, they said to their managers, that we don't like this, we want to be more productive and so they got the ok from the headquarters of Deloitte, so they said produce something better and after doing that they sold off....

AE: ...oh...

KM: .. so they got the knowledge and left. And then Deloitte faced the crashes. That's this kind of risk.

TG: So, that's why we reacted when you said that you want to outsource a whole business process.

That is why we reacted on that.

AE: Yeah, ok, now eh... Alfa Laval as a company doesn't really do very much development. We have some are were we actually develop our own software but what we basically do is a big purchase often these days and we adopt them or we set them up to fit our needs.

TG: Mhm

AE: That's what we typically do on the ERPs for instance. Ah, so I do not think that we are... the processes and that knowledge isn't extremely sensitive I shouldn't say that, but there is, there are areas where actually you can find those kind of classified information as well and that is actually... because I mean, the most important IT software that we are using is home made and it is a product or sales configurator..

KM: So, you outsource that?

AE: We have started to outsource that ahm... the development of it, yes. It has been with a Swedish company and now we are trying, we are trying out and Indian company.

TG: Mhm.

KM: Mhm, so you started inshoring here in Sweden and now you are trying to go in India to..

AE: ... yes we have had a company aa... a. a big... a very famous or established Swedish company, but it didn't work because in the end, but the thing with programming this kind of software is that you need... it is written in C++, but that is not hard to find guys that are good at C++, but in order to program it you also need to understand the products that we are calculating on..

TG: ...mhm..

AE: .. so you need actually to learn a lot about heat transferring and how our products work to be able to do the specific calculation that is needed and that kind of knowledge is something that you can not avoid if you are a programmer, you will learn our product.

KM: And that was the problem why you left from the Swedish company..

AE: The... the problem that we had worked with the Swedish company for many many years, there were very strong experts on Alfa Laval equipment, but they decided to leave that company for doing other stuff, so it is not like they have stolen something for us, but just wanted to do... so they left to do other things and learning curve for the Swedish company to have new people implemented was extremely high... it was very technical stuff, so we decided to try out an Indian company.

KM: It is like a big step after going from Sweden and then to India.

TG: to India..

AE: Yeah, we have but still the procedures are there, I mean we are used to work with an external supplier and we already know what we want after the years working together with them. We have learned a lot how we are should, order stuff from them in an efficient way, how we write specifications and so on, so from that perspective we also know that we would like to have more resources in that area so I think we would like to expand and that's why we trying out with Indian company because there is lot, you know, there is always in this... in this part of the world the competence is available, so it is easier, or much easy to find this kind of competences..

TG: So the main reason for You to outsource is the availability of competence or...

AE: Yes.

TG: ... costs, cutting costs?

AE: I should say that the main reason in this case is the availability of resources..

TG: ...ok...

AE: and than we will have the cost side as well, because we will have more resource for the same cost in India..

TG: ...mhm...

AE: .. in the end.

KM: So there are no trust issues ? When you do that, you have..

TG: ...you relay fully on the vendor...

KM: ... because you said that there is some knowledge to what...

AE: yeah..

TG: ...they have to access..

KM: ... they have to access, so you have dealt with that and gone through.

AE: Ahh we have dealt with it in contracted wise but I am not sure when you say this is bulletproof because, what happens this contract is written with individuals working for a company...

TG: ..mhm..

AE: ..but what happens if they leave the company?

KM: That's what happened at this company...

TG: ... the other company...

KM: ...they resigned, they said we quit.

AE: Yeah, ok ok.

TG: And they took the code an developed other things.

KM: Ok, so another question is, apart from the situation that you dealt with in Denmark have you faced in your experience another risky situation in outsourcing in general, either if in Sweden or if in India for example or Europe. That you can eh...

AE: I can't tell that... there is... I mean this was just pretty obvious but I don't think we have had similar problems depart from that. Now and then we end up in situations where the supplier delivers something that we really didn't expected or something slightly different than we expected.

KM: Do you have a like time issues for example they didn't get to you when you wanted to have the product ready and they were late for example...

AE: Yeah, yeah, that happens.

KM: That happens, and is not such a big problem for..

AE: Yeah it can be a problem but, but the problem in that case is that typically when You buy something... it also boils down to how ok you can be what you expected to have in the respect of when to have it. Because in many cases if you really review and audit yourself afterwards you find situations where actually you can say that we came out better on our side to make this supplier do a better delivery, because you understand afterwards that we were not very clear on what we actually wanted from them or we missed something that showed up after half the time that made them not hit the deadlines so to say... or miss the deadline.

TG: So this also like you practice... that after every completion of the project you do some kind of audit on yourself...

AE: ..yeah..

TG: ...you also tend to analyze...

AE: Typically we do that when things not work as planned...

TG: Hah, yes, yes, that's ofcourse, but, but...

AE: I mean... I mean it's at least to us. It's pretty obvious that is not so easy to be a good... a good buyer of services. That is also a profession to be a very good buyer of IT services contractor-wise, relation-wise or whatever comes up, you have really to be a good... good ehm.. person in that to able to get what you expect.

TG: Do you consider it also a strategy to minimize the risks ?

AE: Yes, absolutely.

TG: Did you develop any guidelines how you...

KM: ... oh yeah, risk analysis guidelines...

TG: risk analysis guidelines before you do any offshoring? ...

AE: ...yeah...

TG: ...like in your company do you have something like when you start with a new project and then you have we take this, this and then we have, you have something like this?

AE: We don't have a thing... we do that actually, specially since we had this issue with the virus problem some time ago but I don't... I can't say that we have a ready made template of risk analysis but we do risk analysis from.. on a case per case basis we actually try do understand ehm... where we have to be careful within this particular case and I must say that we have missed that with a now we mention that you have actually kind of intellectual property that gets stolen...

KM: ..stolen..

AE: that's a, you know.. that's something we write in the contract but don't believe the contract can save you in all cases.

TG: Mhm..

KM: It is not one hundred percent bulletproof.

AE: No, that's almost impossible.

KM: Ok, and then a last question from me is, generally do you consider outsourcing a risky process and if You do how much now... nowadays ? That you have some experience in outsourcing.

AE: Yeah, I mean it's harder... it's harder than you think from the beginning and it is very much harder to save money. I mean when you read this nice reports coming out is that you go to a low cost country because you can do it something very cheap and that is very hard. From that perspective at least to have... I think it is hard actually to save money that to aaa.. get better quality and to get... ehm... to get so to say to buy professional resources I think it looks very promising and from other case I think it is a necessity to continue this grow, w need to have good partners to work with that can help us with and build some pieces and also because I think the IT world is getting more an more complex. Let's take

security for instance or firewalls or whatever it is, network... I mean we installed new routers for the main networks here couple of hours ago and our internal experts they are really scared because this is getting so complicated, it's all getting out of hand, so actually you need to buy best skilled guys from somewhere that can actually take that role, because we are on the limit right now, we can't manage anymore and I also think that this is becoming specialized competence. You will find companies that will take care of all this virus protection and firewalls and whatever it is in the future. And they will, they will be experts and we can't really, we shouldn't think that we should stay on that level, because we can't do that, we are too small for that I think. That is, so I think that we don't really have a choice, we need to do it carefully and we have to be honest to say that it's not typically money we should save, there are other things behind this.

KM: Mhm...

TG: Ok, I think we covered all (someone knocks at the door, talking Swedish).

AE: We are finished I think.

KM: Yeah.

TG: Yes.

## **Interviewee C – IT manager at Accenture**

Interview duration: 34:22 minutes

Transcript

M Manager

KM Konstantinos Mertzianis

TG Tomasz Gidzgier

TG: So.. we will record now.. heh

KM: So.. you're familiar now with the topic? Right?...

TG: ... with the topic of thesis...

M: I've only looked through this (risk list)..I haven't looked through any additional stuff from you either.

TG: Mhm..

KM: No, no.. I think that would be enough, otherwise it would be like a lot of information..

TG: Mhm... Cause this is the most important part cause we're trying to develop a list of risks and to see cause a lot of research has been done in the U.S. and in other foreign countries, so we don't actually know how it works in Sweden or in the Oresund region.. So as we know you are one of the "most important players" of the market that's why we would like to get some insights

M: Yeap..

KM: And Accenture is actually is the company that "they" outsource to "You" but as I heard in the event from the other guy ( I can't remember his name-the first guy), You also outsource now to India and such..

M: But there are two different things: Outsourcing is what we have to be precise about it I think cause it causes confusion otherwise but outsourcing is when you take a task and place it to a third party company which is responsible for it. Offshoring can happen inside the company..so we don't outsource to another company; what we do is offshore the work. So within Accenture we have some people working locally and we have people working in India but they're still part of Accenture.

KM: .. Yeah but in India You have local people working for Accenture?

Craig: they're local people, but that's not called outsourcing.

KM: No.. It's offshoring, yeah but eeh one type of outsourcing, not directly as you say it but it's one type.

M: yeah..

KM: So how much important is outsourcing for Accenture or Offshoring?

M: Offshoring... I mean it's ..I would say eehh, for anybody on the market today then ... there's a lot of pressure to bring costs down. I would say that for everybody who's operating today within a sort of I.T. sector of large organizations ..they have some sort of an offshore capability. So it's has been significant for us ..I mean we've been growing locally but we've also been growing extremely quickly in the offshore department of our business.

KM: you went to this venture like a long time ago?

Craig: I think it actually started in about 2001; our first site was set-up in India

KM: So you have an 8-year experience right?

M: Yeah we've got about 40.000 people now working in India probably another 11.000 or something in Manila, the Philippines,

TG: the two most attractive...(places for offshoring)

M: But we've also got a bunch of locations elsewhere..in China, but also in other obscure locations to address other languages for example like Mauritius which is a French speaking colony and there they're actually working on projects about French....

KM: So the main reason for you to offshore was cost savings?

M: Well it's not so much for Us it's more what is the costumers demanding.. So I mean we obviously interested in what the costumers demand. But of course one of the primary drivers of offshoring is cost savings.

KM: hmm ok,

M: ..But I mean there are a bunch of other factors as well, and one of them is access to resources which has been quite an issue in Sweden and Denmark in the last couple of years. Of course now it's not longer a big Issue with the economic downturn but in summer last year people were still desperate to be able to get hold of people. There weren't any locally skilled resources available. But that's been another fact for driving a lot of the onshore usage for a couple of years to the access to skilled...

TG: So actually you can access the competence there?

M: yeah..

TG: Cause generally what we found when doing our research in literature, they said that considering the new technologies that exist in Europe or the U.S. but they only outsource like the mundane work which is to be done, the programming and...

M: I actually disagree with that. I mean of course that's one approach to it but they intend to outsource perhaps the maintenance of old systems, mainframes or whatever, you know what I mean? But I've certainly seen examples over the years of cases where it's modern technology projects...

TG: like the research in development can even be outsourced ... offshored?

M: Well before I worked with Accenture I worked in the mobile telephony industry and developing mobile phones for companies and we actually bid the office here in Copenhagen was shut down at the end, and the work was transferred to India. So that was research and development of mobile phones and there are a lot of... a lot of the players in the industry like Sony Erickson and Nokia they also have big development centers now in China and other offshore locations to do just that.

TG: hmm, so in general we go now over to the risk part, when you think of any kind of outsourcing initiative, whatever it considers, programming developing or research what are the first risks you see in... this kind of initiatives

KM: first of all do you consider offshoring a risky process?

M: Certainly .. if it is not managed properly ...then it's got a bunch of additional risks in it that you wouldn't see if just had everybody located in to one building and that's the case whether you use an external company to do your...sorry, in case of offshore outsourcing; where you hire another company to do the development work in another country, that would be offshore outsourcing...

KM: hmm yep..

TG: ..mhm..

M: but it's already a problem, you know, if you just do it locally ; and within your own company, even, you may have two different geographical locations. So an office in Copenhagen, an office in Malmo or Stockholm

KM: Yes but it's under the Accenture name, for example, or some other company name... so it's not completely...

M: No but my point is just that, You see this risk with.. eh, as soon as you split something so that everybody is not sitting together then you've already seen the risk probably, even within a company; and that's due to communication or even different culture; probably the two biggest factors that I have seen. I've done a lot of international projects over the years and also with Accenture and I would say that the number one risk is communication, as soon as people aren't...

KM: with Communication you mean relationships?

M: well the two a fairly closely related so if you want to ensure that communication is effective you also need to establish some sort of good working relationships between, eh, at least key people we don't need everybody to know one another; but we at least need to have for example the people who represent the interfaces of both locations, to be in good terms; ehh, speaking regularly together, probably have met a couple of times so that then they can sent e-mails more freely back and forth....

KM: Ok...

M: If they have not met one another then the communication tends not to work as well..

KM: ok...

TG: So, you try to legislate this with the help of some kind of contracts and aa... ?

M: eh, I wouldn't say that we do it in that way, but I mean if you're thinking of... I mean, ..sorry the answers that I'm giving are not so much Accenture specific..

KM: No no..

TG: No no...

KM: ... No that's what we want... Not Accenture wise

M: So in my experience eh, in the best way to do it is when you're starting up a project if we're talking about some people on the offshore type of project, then it's to bring some of them onshore; so that they're on sight for two weeks, months, whatever, together with the development team, when they go home, then you've got a much better relationship that they're able to sort of communicate much more freely back and forwards; In some places eh, you know I've seen projects where you actually have some people from the offshore location remain onshore for the duration of the project. So they sort of represent the ... the same point of contact so that the organization in China, India, Manila or whatever it is...

TG: It's like the literature we found that... they call it the "relationship trauma"... and they say that the best way to going into a contract with the specific vendor but you you did agree with that? So that, it's better, first like, personally maintain the contract and then have some special agreements made or...?

M: Well it depends... because what I was just saying here is that... that is more something that we do internally; so if you take Accenture as an example, ok, then we will be typically be contracted to deliver a project and we will always have local people in contact with the customer, so the customer will typically be dealing with Us ... that is kind of a key differentiator for us. Eh, and then internally of course, then we've got a few of different options as to how we handle the communication with an offshore centre in India for example and that would be some of our own internal methods; Of course in some cases, then, the customer also needs to have contacts to India but that would normally be something that we'll set up internally. It's much more of an issue what you're describing there in the case of ... eh, if you as a customer hired an Indian company or a Ukrainian company to do something for you; then you start to see more of these issues that you've also mentioned here (the Risk list) regarding... ok "how do you make a contract" and in which country is the contract binding all of those sorts of issues... start to become more important.

TG: That's like the second step..

M: Yeah, but eh, then you do have a problem; then you would need to at least eh... when you are, let's say working at, how much is this developing project going to cost? Then you should probably add some money on so you could have some of those people onshore, locally, so that you'll be able to get in contact with them. If everything is done on the other side of the world, I would be a little bit skeptical as how well is it going to function

TG: So either there is this kind of "technology risk" and then the misunderstandings in the demands still exist.

M: Eh, I mean it's a difficult thing to get right and I mean if you put yourself in the position of a customer, who has maybe never done offshore developing themselves and then they sign a contract with a company on the other side of the world who's going to develop something. Who is going to take responsibility for specifying exactly what needs to be done? I mean if the local company here, the customer is maybe not used to really going in details with the specification of everything then it's maybe not going to be them and if it's the supplier, so the company from the other side of the world coming in or visiting maybe for two weeks or something like that, then of course there's a risk that they don't capture everything...

KM: Yeah, because it's also the barrier between...

M: yeah, there's probably a language barrier, a cultural barrier...

KM: the other thing that we would like to ask is when You said "you offshore", do you offshore knowledge? Or do you consider it like knowledge for example...

TG: ... the know-how of the company ...

KM: the know-how, like for example Accenture has this ISO on something and you want to build this more in India, but this is specific knowledge... if you... the risk for example if you do that it might get to some other people that you don't want to. Have you faced such a situation?

M: I haven't seen it in Accenture, I've seen it in other companies that I know of. As part of outsourcing comes with (or is part of) the work then there'll be some countries that they'll say that it can't be on

them (that is: they can't outsource to those countries), where there are very weak legislations around, protection of intellectual property rights for example. So that can be an issue sometimes for the companies that have their development done in China; just as an example.

KM: .. but for example one big company, I think you know it Deloitte, they had offshored like five years ago their software to a company in India and to developers in India but they gave them specific stuff to do, so the developers they got bored after a while and they said no they're not taking advantage of our full capabilities so they complained to Deloitte and after that Deloitte said ok we give the ok to do as you like make better stuff of what you have; so they took advantage of that and after a while they sold out and took the technology and Deloitte faced a huge crisis... That type of risks. Have you faced such a thing or something similar?

M: I haven't seen it within the time that I've been at Accenture, but I mean I know of the problem. Of course it's always a risk. But I think it's important to maybe also underline that it's also a risk that you face onshore...

KM: ... aha, you can also face that in onshore?

M: I mean there are plenty of companies throughout history that have also had a problem with some of their key personnel have a good idea and then leave from the company to start their own little stuff...

So I mean that happens also in Denmark, in the U.S, in Sweden or wherever.

TG: so this is a situation faced also in Domestic?

M: yeah, so I mean of course it's easy to be frightened of it happening in India or China or something like that but I mean the problem itself is not a new one. Eh, one thing which of course you might be a little bit more concerned about is...eh, in a country like perhaps China where the legislation is not that strong, the court system is not that strong around these things; that is that something you got a pattern on gets stolen and then copied and reused and maybe not sold back at your local market but at least sold to companies in China, and that of course is a risk.

KM: Is there a way You mitigate such issues? According to your experience how do you solve these problems?

M: If some companies just insist that the work is not done in those countries...So source code for an example if it's an I.T. system is not available to the employees working countries where they're considered to be high risked.

KM: Or they simply don't offshore knowledge for example?

M: yep, or at least they do then it's only to certain countries that they let's say trust. So you see that sometimes

TG: Ok, so actually there are still countries that can be considered "hostile" countries?

M: yeah, not hostile but just where the legislation and the court system is maybe not yet robust enough to be able to handle a court case on intellectual property rights

KM: ok...That's what they say actually about those two countries, I've read, that they don't have so many laws on intellectual rights, like the Philippines and India...

TG: ... do you know if they changed it, or what is the situation?

M: I'm not familiar with such a situation in the Philippines. I haven't heard about it being a big problem there but at least in China of course, because it's not you can say a "democratic system" so there are other factors that come in to play, so I think from what I've heard over the years that it looks like that companies would have some difficulty in ... lets say in a court case against the local Chinese company. That would be really difficult you know, if you go head to head and say that's our intellectual property and there's a Chinese company that's going to buy the status of the assets that we owe, so I'm not sure who would come out the winner in that type of situation.

TG: and in India the intellectual property laws? Have they changed?

M: they've been improving but I don't know you know exactly where they are at the moment and I think it varies across different areas but both they and china are under a lot of pressure to tighten up; the thing is also that as Chinese companies and Indian companies get better with their own technology then they have a much greater interest in being able to protect their own property rights because they're also developing high technology solutions in those countries now; and in order for them to be

able to protect their own rights they also need to enter into reciprocal agreements so they promise to protect the rights of American, British or German companies.

KM: So now we would like to talk about the topic that we are facing in our thesis; do you see any differences or do you understand any differences between domestic (onshore) like for example Accenture outsources or onshores something to another company in Denmark, are there differences in risks between that type of process and the one that you do in India (offshoring)?

TG: What are the differences to your knowledge? What You could like at the first...

M: I mean I would say, no matter who is doing it, is it Accenture or anybody else doing it, then you have the classic communication related issues that... Now things are no longer...eh perhaps can't be done in local language; eh... you have the problem that now you need to communicate through other mechanisms than face-to-face, you have the cultural dimension and then you also have a time zone gap in a lot of cases not always but at least in most cases

KM: which could be exhausting for a manager, for example, traveling all the time.

M: Yeah it could be tiring, but the point is also if you got some issues that you want to get clarified and there's a 7 hour time gap. Then you know the time that the people in Sweden are going home from work 4 o'clock in the afternoon or it's supposed to be the other way in fact, the time that they're going home in India 4 or 5 o'clock in the afternoon let's say 5 o'clock then it's 10 o'clock in the morning here. So when we have a very small overlap maybe an hour or something where people are both at work in both locations and that can be a problem sometimes when they're trying to solve problems. So if it's a piece of software that doesn't work and you got people at both ends through the telephone line trying to fix the faults..

KM: that doesn't exist for example here in Denmark when a company onshores something to a local vendor...

M: .. so all of those types of risks associated with the distance and the culture and so forth I mean eh, is something that companies are willing to accept if it gives some sort of a premium in terms of cost saving.

KM: so they invest in order to build up that communication barrier, to make it better or try to mitigate it?

M: Yes

KM: ok so and...

M: Well there's always going to be a risk ...

KM: ...and in domestic, which is like the most important risk factor you consider? When you onshore.

M: Well it's still the same, I would still say that it is the communication and... and also as soon as we're talking about outsourcing...

KM: ... although it's in the same country? right? You know that it's more easier for the companies to communicate?

M: yeah but it's necessarily in the same building; and you know I've experienced previous employer situations where just because people are in two different floors at the same building then they don't really communicate very well together.

KM: ok..

TG: ok ok...

M: So you know you will end up in the situation were people are even not communicating very well in the same building; so imagine taking a task and then outsource it to a customer in the other side of the town that's going to be harder. Then you've got an issue of, you know, the personal chemistry between the people of both organizations which could be different; and there are two companies so it's possible that they have different corporate culture and perhaps the two organizations don't click – match; and then the other risk, and this is common in both companies, that is what are the interests of the two parties? Are they align or are they competing? ...I mean what you don't want to do is create a situation where the outsourcing company is doing everything they can to sort of expand the scope of their work and the customer is doing everything they can to cut it and make it as cheap as possible; because the result of that would be a low level of service and the individual employees done at the bottom level who are doing the work would find it quite dissatisfying. You know every time they need to do any

little thing then they need to do a change request; over time they need to do something that is not covered.

TG: ok

M: So you're much better off having some sort of an alignment between the groups; so that they have a common interest or common incentives to succeed. Thus it's more like a partnership rather than just a strict customer-supplier contract or relationship.

TG: So while talking about this relationship, are you aware of the "Winner's Curse"? We find it in the literature when you contract an outsource initiative to someone, when like the winner of this contract (who gets the contract) he probably wants to do a lot of more than he's actually capable of doing. So have you in any time faced such a situation? That you contracted some work to a supplier which was not able to do the work but had a competing price, let's say that they would do more for less...

M: I haven't experienced myself, but of course I've seen that around the place; I mean especially some contract ... enduring processes are fairly focused on price, let's say. If price is the only factor that has been considered when they're delivering the... picking who's going to deliver the project then companies have an incentive fortunately enough situation to make their price as low as possible and then try to maneuver afterwards ... and that has been seen thousand of times around the world..

TG: It always ends up bad? Or...

M: maybe not always... but in any case it defeats the spirit of the... alignment so usually I think perhaps some more intelligent trading processes will have some sort of waiting factor assigned to different things; so price is a factor and it gets assigned maybe a 30% weight factor and then matched to requirements is another one ... then different things are put in place and then the other thing you can do is to have some sort of, like a bonus pool to be shared perhaps by the two parties if things get done beyond expectations. So then the supplier actually has an incentive or so to perform up to or beyond a certain level. Otherwise, you know, they are only interested in trying to do their job as cheaply as possible in that the only possibilities that they have to preserve their margin..

TG: ... that can happen in both, offshoring and onshoring...

M: that can happen in any contract situation

KM: and eh, two last, I don't know how much time we have... ok we have 3 minutes. One question is about the economic crisis; do you consider that it effected badly or in a good way offshoring or onshoring?

M: I suspect that we'll see offshoring be pushed even more year or two, personally. And that's just because of "cost focus"...

TG: ok, but do you think that offshoring creates more work like, in Denmark they offshore the mundane programming that it creates more work in the "highly skilled" levels? we found evidence that offshoring creates more work domestically...

M: ... yes, I mean there's two different types of situation; one is that you take some existing work and then you transfer it somewhere else to get it done more cheaply or so... So it's hard to imagine that that would really create work locally and more to speak if that would transfer stuff directly out. And you know that scene corresponds to closing a factory and then relocating it to Poland or somewhere else to do it more cheaply. But the other case is where if by having a combination of some skilled people locally but also some skilled people onshore, you can deliver a project for a lower cost in total than if you had all of those people locally. So let's say you have 20 people locally and 30 people offshore and the total cost of the project is \$30 million; and if to do everything onshore the total cost were \$50 million and you do the business case and you calculate that the project would generate a benefit of \$40 million; so in the one case if it had been delivered exclusively onshore then there would be no arguments to execute the project, it would cost more than the benefit it would generate. So there would no reason to do it; but if you can NOW deliver it more cheaply for \$30 million then you've a NET benefit of \$10 million. And it's those types of projects where you create work the cost in doing it wouldn't have been economically feasible before.

KM: Don't you also consider the fact that, when offshoring for example some regular work, like developing something specific then there are some vacancies in the company that can be filled up with

more “creativity” or... like for example “Now we have more time to be more creative because we’re not programming the same thing all the time as we have given it to India for example

M: Yep, I mean that could also be an argument of course. It would be up to the individual company, how they handle that situation. You can imagine in the times of an economic crisis that the thought is ok, but that is more we can save we don’t have enough money to have people just walking around thinking and being creative, we just need to get the job done and now we’re getting it done more cheaply. But of course you’re right in other situations you have... you can now do it more cheaply and that allows you to invest some money in research and development or as you said more creative stuff, locally.

Km: ok

TG: Final question: would you like to add any risk that we didn’t mention in the summary (list)

KM: yes, something that you didn’t find...

M: ehmm, I think one...

TG: this is like an abbreviation; we read a hell of articles which tell stuff and this is the comprised list, cause there were lists with 200-250 risks

M: yeah of course, I think maybe one which I would add into here and it’s to some extent it’s covered by this “transfer of knowledge to supplier” but it’s more just a general mobilization process. How do you handle that their getting everybody aligned not just with the supplier but also with the customer, the new way of working, so you’re not from one day to the next it goes from some internal function and the company is doing whatever job there is, payrolls or some sort of R&D, finance support whatever and now suddenly there’s an external company that’s doing it. And all of these people they used to be able to just walk down stairs and talk to “Jens” and ask him a question and now “Jens” doesn’t sit there anymore and now it’s “Birgit” and she’s in this other company and I mean, who do they call? How do they get through? All of that stuff it’s actually a really dip task to communicate and put everybody’s expectations align. So I’ll call that “MOBILIZATION”.

TG: and you consider it a strategic risk ? because it’s the alignment...so

M: ...yeah, you could actually put it more down in operational because it’s your start off your operations, basically.

TG: .. somewhere in the middle..

M: ... but that’s typically where a lot of these things go wrong because people’s expectations get disappointed very quickly at the begging ...Being promised that things would work at the start but they don’t, of course because it’s a big and complex change

KM: ok

M: and then there was actually another one that occurred to me when I was going through it... Yeah I guess that’s also covered by your “relationship between supplier and contractor” and I would probably put that up in the strategic level as well like I was saying before about having some sort of a partner alliance rather than just a strict contractual craft. So...so, I mean that’s really at the strategic level that is you know, how are you really going to end this relationship? Is it going to be a kind of master-servant client supplier or is it going to be some sort of partnership? So you need to have really thought about that before going into the whole outsourcing discussion.

TG: ok you just draw a line there ...

M: Alright...

TG: ..ok, that’s it thank you very much ...

**Interviewee D - Gitte Bergknut (E-ON)**

Interview duration 76:17 minutes

GB Gitte Bergknut

KM Konstantinos Mertzianis

TG Tomasz Gidzgier

GB: So, first of all in which department in Lund are you studying?

TG: It's InformatiM

KM: InformatiM but we're doing the master in Information Systems

GB: Ok

TG: So It's under the school of EconomiM, actually

GB: I've studied at the InformatiM in Lund

KM: Yes?Really?

TG: That's really nice

GB: I graduated in '96 so..

TG: ok

GB: It's been a while I know...(laughter)

KM: Did you have Sven Carlson?

TG: As your professor maybe?

GB: He was there but I didn't have any course with him

KM: he's now our..

TG: He's our supervisor

KM:...our supervisor in this thesis

GB: In my thesis I had Dipak

TG: Aha! Ok

GB: yeah, in one of them and in the other thesis I had Kjell Ake Holmgran

TG: Ok... Dipak is now the head of the faculty

GB: he was the...prefekt

TG: yes, yes he was, ok... so..

KM: First of all did you receive this (The outsourcing list)?

GB: Yes, as I said I have seen that I received a mail but I had had a...been very busy lately, so...

KM: I don't know if you want to read the title, so as you can get in the...this is the title of our thesis so as you can get...

GB:"Risks in IT outsourcing" yes, so long I have eh... get this... ok lets shoot and see what we have...

KM: yes so eh, first of all you have dealt with outsourcing right?

GB: eh..well...

KM: or offshoring, or nearshoring or how you call it...

GB: aah, I'll give you a short version of my background. As I said I've studied at Lunds University with focusing on Information Security; after that I started working in a company working with clinical trials and shortly after that I started as a consultant, I worked as a consultant for 10 years at several different big consulting companies where the last one was CapGemini who is big on both outsourcing and offshoring it's part of their business concepts. So yes I have experience from there but I also have since... many of my clients were big big companies in Sweden and most of them were looking at different kinds of outsourcing or offshoring concepts. Ehm, if we go to E-ON, eh... we are kind of doing a little bit of both but the opposite because we are actually insourcing or have been insourcing for approximately a year we started our own IT service provider in IS you meet Oskar Sundgren we passed through the corridor eh and they assumed E-ON is a German company so our head office is in Düsseldorf Germany. So as we insource, well here in Nordic we had outsourced to Logica most of our IT, in our insourcing unit to E-ON IS and also offshoring it someway because in moving lots of our administrative IT to 3 data centers in the world. So we only suppose to have three data centers in the world when we are finished with all the ...

TG: ok...

GB: But they are all in Europe

KM: So you don't... when you offshore...you don't offshore like most companies do, in India or Philippines or...

BG: No, we had had a discussion but at the moment it's eh, it's both a big risk and it's also eh, as we see it a little too complicated; ehh...

KM: oh so you consider it a risky situation to offshore ?

BG: eh..., yes we do but is also... just got to get to this one, so...(phone rang) it's reminding me I have a meeting now....(laughter)

TG: So ehm, so what was the main reason to turn down this proposition to offshore, to India or Philippines?

BG: eh, the main reason is actually because E-ON as a group is very young although in Sweden we are 100 years old company, but as a group it's very young it's not more than 10 years old...

KM: as a multinational group?

BG: multinational group, E-ON group is the world's largest private energy company. We are 80.000 employees worldwide. Mostly sited in Europe but also in U.S and eh, little bit in south America I think and a little bit in Eastern Europe and the closest area, yeah... to that part of the world; and it has been formed by a purchasing, so there's also a large consolidation of and stream lining of business processes and we got our organization of our desire to structure, to become one E-ON as we say and that's also affecting the IT infrastructure and it was thought as a little too complex task to both get all those different market units and companies within the market units that had different IT infrastructure, different company cultures, different company organizations to get all that into one and do an offshoring at the same time. It was NO, this is too complicated too risky to do it all at once. Therefore we start by getting our organization structure the way they wanted and to get one common IT infrastructure.

KM: ok

BG: Then when we have that in place and all our companies, then there will probably be a new evaluation of what alternatives we have to get a cost effective IT operation.

TG: ok

BG: Then, will probably, the offshoring become an issue again, I would say

KM: but not now...

BG: not now..

TG: like the problem is because of the... the network complexity; that's the main risk, so that you could loose something...

BG: eh, it's for the administrative data yes

TG: ok

BG: but we have another risk and I think that is part of what you are trying to tell me..

TG: ...no but this is also one of the risks, you mentioned already because of the big network and..

BG: ...yes I mean 80.000 employees just here in Nordic we are approximately 8.000 users where I would say 1.500 of them never enters an office, they are only mobile users and eh... I don't know how many servers...around 2.000 servers

TG: ah, ok

BG: and we have as an extra complexity, we have what we call our process networks or industrial networks, eh that's the core...

TG: but that's obviously... you could not outsource that?

BG: no, and especially not to India...But we have an integration between the industrial networks and the business networks. One of them is due to Swedish law, if we come to the electricity; all networks are owners, we own a lot of our electricity networks. We are forced to do an accurate metering of the consumption that each customer has; and we have approximately 1.000.000 network customers and approximately 1.000.000 that are only buying electricity but it belongs to another network

KM: like my place...

BG: but that's a deregulation that is performed in Sweden that you don't...before you have to buy the electricity from the owner of the net, now they have separated so that if you're living in that house over there we own the network but they can be bottom flow customers or...

KM: yes something else

BG: whatever... that's free so, that's approximately the size of it. But the network owner has the obligation to meter the consumption in an accurate way and deliver that meter value to the sales eh... vendor. When you as a customer get your bill you will get actual/accurate monthly consumption from your first vendor, no matter who is your network operator

KM: ok

BG: that's basically...that's a lot legal requirements that we have from now

TG: So like a second eh... risk would be that the legal requirements also, that's why...

BG: There is a lot of legal requirement, this is one of them and it's also to deliver it and that means that we have to collect various from our industrial part cause metering in every home is part of the industrial network;

TG: hmm

BG: and somehow manage to get that over to our administrative network and from there we take it into our business system SAP and from there we can either sent bills to our customers or sent the values to the other electrical utilities in Sweden the ones that sell...so we deliver actually.. actually we deliver those values in a kind of three ways: to ourselves, to the authorities and to the other company that needs to sent their bills to their customers

TG: That's really complex

BG: yes

KM: and when you say that you offshore in Europe ... you told me

TG: they outsource

KM: you outsource in Europe, eh, do you...?

BG: in a way we're insourcing

KM: you're insourcing?

BG: from our perspective in Nordic cause we had it as an external partner before, now it's an E-ON own company

KM: It's under the name "E-ON"?

BG: yeah

TG: But if we go back to this time when it was an external partner; how did it work this relation because by then it was probably the outsourcing, did you have any contracts?

BG: of course... of course we had...

TG: how did you...? What was the main risky situations like when you did it here in Sweden cause...?

BG: For sure it's kind of the same risk no matter if you have an internal partner or an external partner, ehh...I mean the most obvious one is that you have to have a good ehh, computer center.

TG: ahmm (phone rings)...

BG: ...with the accurate physical protection and so on. The other risk is to have redundant data communications eh, and that's not so easy to achieve as you think...cause you think you can buy one communication link from Telia and one from another company and then you think you have redundancy; that's not that easy because normally they use the same nodes and there are cables, they own different cables but the cables are going on the same street; that means that if one is cut all of them are cut; So we had very hard work because we had two computer centers here in Malmo each of them has two lines out, two different vendors and to get the information of which tracks do they use to get out to the world was kind of tricky and that was what we required because we wanted to be sure that we have at least two ways to reach the world.

KM: ah ok

TG: so in order to overcome that problem with outsourcing you just took the..this inhouse?

BG: eh, I think it was more political reasons for the inhousing and they thought in this as I said large project of of harmonizing and integrate to one company infrastructure it's easier if you own all the IT

partner so to speak and to have one external partner is not that easy to control when doing such a large project

TG: hmm, but you said that you had Logica at once. Can you tell us something about it something that ...

BG: But you have to have good SLA requirements and in that part is that you have to be well educated and good purchaser and I will say that there was some flaws here...

KM: between Logica and...

BG: Yes were you kind of...a little eh, how should I put it and I think that's quite common; you're a little naïve as a customer when you do... get into an outsourcing deal because you are not used to specifying everything; you kind of assume that they would take care of you... but no

KM: It's not like that...

BG: They don't! They do what they're required to do in the SLA and that's it. I can give you another example it's not from here, it's from large companies that I've worked before

KM: yep

BG: they did a larger outsourcing deal to HP

KM: Here in Sweden

TG: A Swedish company?

BG: Actually it was HP Europe because they're so large cause it was one of HP...it was too large deal for HP Sweden. So HP Europe... It's a Swedish company a head of blabla Industry...

KM: because it's about domestic

TG: Domestic outsourcing

BG: but they're international,

TG: ok

BG: they're global as well. So as I said I worked with large customers. So it's a Swedish company but it is a global company

KM: mhmm

BG: they did this outsourcing deal and they thought they had did really good SLA , this thick, detailed requirement of everything; and one sentence said that the network should be kept in the condition it is; and what they meant was that it should be full attached as it was when they turned it over. The outsourcing partner, they interpreted this sentence as... as is; that meant that if no eh, work – service work that didn't patch, they didn't do anything to upgrade the network...

KM: so there was a flaw there

BG: So they felt that they were been tricked... but actually it was just one sentence that could be interpreted in different ways and they meant of course that it was to... they handed over a network that was in tip top condition and the meaning was: keep in tip-top condition whatever it is; but the service provider said no it should be kept as it is at that date; and three years later it was a very very lousy network, it was very unstable, it was lot of eh...

KM: malfunctions?

BG: no eh, capacity problems; I mean the growth of IT and the growth of communications requirements in three years in a large company is enormous; so after three years the network as it was couldn't bear the company's communication needs. So they had a large problem of and lots of lawyers to just analyze this one sentence and struggle about how should it be intergrated..

KM: so it ended up in legal issues?

BG: yes

KM: to the court and stuff

BG: yes

TG: and that's really bad

BG: and a lot of frustration and kind of...like so... when I came there as a consultant I felt like “ I don't know... their kind of...” assumed that they mention the main service provider eh... started on the first day; if you get a computer kind of...yeah...

TG: but what was logica doing for E-ON? It was programming or?

BG: Logica was doing a lot of things and they're still doing a lot of things because they are from our IT company still buying some of their services; but they had operational eh... of our main computer centers... was more

KM: and another issue is do you have communication problems speaking like ... between E-ON companies? For example E-ON in Germany and in Sweden sometimes you have to communicate in order to cooperate for some issues. Do you have communication issues? That's like...

BG: you mean like technical communication issues?

KM: Not technical only, just for example: You are used to giving orders to these guys... downstairs and now someone in Germany had to give orders to someone else and he doesn't know him and it's like communication; Because we read a lot of articles about this.

BG: Yeah... I would say perhaps not exactly the way you said but we do have some cultural differences that is frustrating to deal with. Ehmm... from both sides, I know that the Germans are very frustrated that we here in Sweden we have to have meetings and we have to discuss and we have to have a consensus decision and talk to all our subsidiaries even here at the head office for Nordic, we have.. we don't just take a decision without speaking with all our ... we have 18 subsidiaries that are quite large and that we owned more than 50%, we speak to all our IT people and security stuff and to all of them before we take any major decision that are affecting them more or their budget; and the Germans they don't understand why? "We own them!"

TG: ok... so that's hehe ok

BG: why do you ask?

TG: yeah

BG: it's your company, just tell them what to do!

KM: yeah sometimes...

BG: yeah so they are kind of frustrating on us from that and as we have noticed that we from a Swedish perspective think is really frustrating is that they don't report problems; so everything on a project is fine; eh...we have one that we say is kind of big enough here is one of those big as I said we had this big project going on; one part of it has now been shut down, actually which are found eh in the end of March and it was a successful project; it held financial promises and basically it was a good project; it's the official version; It's still not finished even though they closed the project, we're still working with a lot of red issues; it has become almost twice as expensive as I said for us; there has been a lot of frustrations going on and they had to change the design because there was fault in the design; basic design that they had done was just not good enough, so they had to change and do another design which was not mentioned at all in the official report and we are kind of:" how can they say that this is successful and we had a lot of problem last Autumn when we had a lot of interruption and smaller incidents due to this project.

KM: so there were...

BG: so in our opinion from a Nordic perspective it was a disaster project; it's kind of even with the Swedish laws of employment, people would have been fired first

TG: aha, ok

BG: (laughter)

TG: that's really bad!hehe

BG: and it said aaa it was good..

TG: but in general what you consider more risky if you do offshoring? If you outsource? What is more risky if you offshore to India or if you outsource....

BG: If you outsource to India ...

TG: for example...

KM: as I get it in order for you to offshore to India you have to establish first good communication in Europe and the ones that you have and then go to India...as I get it but you can...

BG: Yeah that's why it's... in general that is very important for all companies that are considering offshoring is that they do look at the legal issues; I think that that's the most common that you miss cause you assume that you are a Swedish company and you are dealing with a Swedish offshoring partner perhaps like CapGemini in Sweden and then you think it's Swedish law but it's not. Eh, it's the

law where the service physically are located; so if you offshore to India, if India's law is the one that should be applied, in India hacking is not a crime; it's not forbidden to enter someone else's ... In India.

KM: ok

TG: so but actually

BG: so Swedish company that offshores to India has no legal protection against hacking

TG: ok

BG: if they are penetrated. If the servers are in India

TG: so actually if you at E-ON with the offshoring would you use partners in Sweden to offshore or would you do it on your own?

BG: I think it's very dif, I mean doesn't matter what country the company you deal comes from; but what matters is where you put the service; cause that's, that's the legal

TG: hmmm

BG: cause say what you want but you don't change Laws and the legal system doesn't change very fast and they are very behind, eh... I had a friend of mine that had a meeting with some prosecutors eh... in Sweden, major legal event; she was there as a speaker and during one of the breaks she spoke with one of the people-prosecutes... not no judges

TG: Judges ok

BG: Judges, and these judges said yeah I have such problems with IT crimes because, because the crime has no...place

KM: hmm yeah

BG: and if it has no place I can't judge cause it didn't, it wasn't conducted anywhere...

KM: so you don't know what law to apply...

BG: and she's kind of asking "what, what do you mean?", "well yes it's in cyberspace" and she kind of looked up to heaven and my friend said kind of I will never ever draw internet as a cloud, anymore.

TG: haha ok, so taking that...

BG: she, she simply didn't comprehend that the servers are physical and they are located somewhere ...

KM: so you don't support the idea of taking the it ... into the cloud?

BG: this was... before the cloud concept was eh..., and that is one of my major concerns if I look ahead is actually how to deal with eh legal issues in the cloud

KM: hmm yeah because...

BG: I don't think anyone is prepared for it and not at least the legal system is not prepared

KM: yeah but from the other hand there are big companies, because of our research we found big companies that are going that way...

BG: oh yes!

KM: Like Microsoft, Accenture they're going to "the cloud" and they outsource

BG: I mean there is a lot of beliefs and technical, from a technical point of view, there's large benefits and there's lots of possibilities so I can understand why you want to go there but the legal issues they're not following and I would probably think that it's eh, it's a very difficult situation you put yourself and your company in; you go into a technical concept that is not supported by the legal system; but you don't know if you break the law or not

TG: yes. How is the.. how is the situation, like domestic, so in Sweden, how is it with this...

KM: do you have such problems?

TG: do you have such problems here also?

BG: eh well...eh...

TG: right now considering this partnership with Logica...

BG: we have, we have... we have legal issues as it is even when we use as I said with those three computer centers; because we have lots of information that we are not allowed to keep in any other country than Sweden because it's under military secrecy...

KM: ok

BG: so... that's because as an electrical utility you our eh...considered eh important as in case of war

TG: hmm

BG: eh, so that is actually a problem because em, sometimes our managers that do the hole IT strategy they don't...perhaps...many times it's consultants from Accenture or somewhere else and they don't know the business they blabla IT and IT strategy but they don't know the different concind... eh considerations that you have to make due to what business you are; eh so in some cases we have an IT strategy company, strategy that is pointing to one direction while we are legally forced to go in another direction and that's...

KM: that's a bit frustrating...

BG: that's a bit frustrating as it's difficult...so

TG: and what do you try to do then? How do you deal with that?

BG: eh, well...

TG: if this...how do you deal with that?

BG: have you seen the doors that are going around...(laughter)?

TG: ok ..

BG: it's eh... you have to be a very good diplomat, that's one; so in one... in one end we sometimes try to influence and say "hey hello we cannot do this!" we have to think some other way and do other solution. That's one way of solving the problem making the... the company change the strategy. Sometimes where I do not something them turn the other way and go to the legal authorities as we are under and say hey! those laws that you have well in some cases we cannot fulfill them and in other cases it is very... very very expensive for us to apply to them and then you can always say are you willing to pay that extra price? And that moment they say NO...(laughter). And then we have a possibility to make a deal and actually negotiate what are the conditions that we are allowed to keep the data and we have got approval to move some of our sensitive data regarding our electrical networks to Germany.

KM: ok, but under "E-ON"? right?

BG: but under "E-ON" yes, but it's hosted in Germany; but it is with strong encryption requirements eh... that the technicians that have administration rights on servers and databases they have to be screened and approved by SAPO in Sweden.

KM: so there are trust issues between Swedish E-ON and German E-ON and U.S. E-ON?

BG: I would say due to how much we have to negotiate to get that approval and the risk analysis that we have to perform when we had external... two external consultants that actually performed the risk analysis together with us. Eh, I wouldn't even try to get it to India...(laughter)

TG: so how much... how much information can Logica access? Can Logica also have access to some of this sensitive information or you also keep it away even if it's in Sweden?

BG: it depends on...in some, some cases yes, it's eh... we have one server that is physically left and unlocked in our computer center which has very restricted access; eh... we have a cupboard that is locked with a physical way, where there is none at IT department that have a key...

KM: aha ok

BG: so they have to go a special unit that works with that data and say we have problems that someone needs to do something with that server and have stuff from there with them when they do their job and that's even E-ON IS Swedish stuff.

TG: so generally you only outsource here in Sweden to get some...

BG: No, I mean, we..

TG & KM: like it's under "E-ON"

BG: under "E-ON"... So we are on some special, special laws but even as I said as a consultant other companies doesn't have that stat in their forehead actually, emm...there are some considerations that also from a business point of view and it's mainly legal issues that I would say that it's yes...

TG: so it's for you, for E-ON it's better just to take everyone under "E-ON" and then you have full control knowing the conditions...

BG: yeah, but we have legal issues even within E-ON

TG: oh ok

KM: that means for example that Swedish E-ON can look for its best going and doesn't care about the German? Or do they communicate for a total?

BG: we commu, we communicate and it is supposed to be that everyone is right for the better total; but if we have legal requirements that say that we are not allowed to go for the better total then it's not an option.

KM: ok

TG: ok

BG: so

TG: so yes

BG: and that's the situation that we sometimes get into

TG: ok

BG: but there's also a possibility to turn around and go back to the authorities because they're not, they're not so technical advanced on science either the ones that make the requirements decisions and sometimes you can go there and talk to them and explain how it works and explain how you would like to protect the information...

TG: ehmm

(phone rings)

BG: I think I have to take it

KM: yes yes..

GB: (talks on the phone)

TG: Yyyy, so, yes then like a general question.. now we have this economic crisis..

GB: Yes, economic crisis..

TG: Do you consider it as a risk to outsourcing, whether it considers inshore or offshore?

GB: Well, I do not know if economic... Well, of course in one way it is something you have to be more aware of if you do outsourcing now when there is a financial crisis, you really have to make sure that the partner that you select has a stable financial situation ... cause otherwise you can get in prob.. trouble if they are going bankrupt or aaa.. being bought or something, you might end up with some completely different partner than You thought you were ending up with.. or perhaps if they go bankrupt and they shut down and then you are standing there and have to run your IT...

KM: Do you consider it as an opportunity.. now to outsource? Because of the economic crisis..

GB: yyy.. Well, that's... aa.. other part of it.. yy, because since it is a financial crisis you have a.. hhm.. .. stronger position, if you are a strong partner and you have a lot of money yourself, you can make good deals..

TG: .. mhm..

GB: ... and as mhm.. we are re-writing many of our consultant partnership deals right now due to that many of them are pressed..

TG: ...mhm..

KM:.. because of the economic crisis..

GB: .. because of the economic crisis they are, ... so we said to them ok, aa.. our deals goes out Autumn or next year or what is, we are willing to give you a further deal if You reduce the costs with the 20 percent..

TG: mhm... Ok. And the..

GB: (laughter)

TG: when you select a vendor..

GB: Ehm.. that's an opportunity eee that when it was a high conjuncture everything was going fast, fast, fast it was very hard to press prices..

TG: Mhm..

GB: It is more or less that be happy you got an SAP consultant..

KM: yes..

TG: ok..

GB: this is like take it or leave it..

TG: Now..

GB: Now it is the opposite way.. Ok, we could hire plenty of your SAP consultants but only for that price..

TG: .. yeah..

KM: .. and they say yes because...

GB: (laughter)

TG: When you select a supplier, how do you do, you have some kind of negotiation you can take in different offers? Or..

GB: That is as it is for every business deal aaa, for the normal businesses the subsidizes within IT the strategy is that they do not go to anyone outside and they go to E-ON IS, but E-ON IS can take in offers and deals.. But we do that, ehm, the common way is that you request for offers from perhaps 20 partners or 30... ehm.. we are members of some procurement ... prescription.. there is some paper for services where You have a large deal that you do not want to do a large purchase ... you put an ad in that and then it is a way to vendors in all over Europe in many different areas and they can say, hey, we are interested and then you get perhaps 20 their interests to make some kind of deal with us and from that you can say hm, well those 10 here didn't get what we were asking about, but those 20, hmm we sened a request for an offer then we tell them a little bit more about what it is we need and then they get some time to get back with an offer..

TG: So.. speaking of that are You aa aware of, you know the winner's curse. Like aa, if some company wins your contract and they said that they agreed to provide some special service on a very low price for example and then in the end they can not provide this service but they offered quite a lot, did You... are aware of ??

BG: Hm.. well...

TG: Within IT, we are talking about IT..

BG: Within IT, well of course we have to have lots of requirements and aa.. prices of everyone of them and quality of service is another (issue) that we are working quite a lot on and we have quite large security requirements generally and of course we want all our business partners to keep them as well and the... when we are doing deals like that the procurement department that is holding it and they are also have to look at some other things like environments, ethical, so we have a policy about..

TG: ...so the risk department looks at the partners partner

GB: It will be looked at, and if we find something they are out of question more or less and it could be child labor or something like that..

TG: Yes..

GB: No way you can get a deal, aa and we also put requirements on our partners, so they put the same requirements on their partners..

KM: .. their partners..

TG: .. so you can save...

GB: So at least in two.. how you call it ? "farled"..

TG: Yhmm, yeah..

GB: I just lost it..

TG: yeah..

GB: But you understand what I mean?

TG: yes yes..

GB: At least two partners away and the same requirements are valid .. it is also of course we have secrecy requirements and a secrecy deal that we write with all our partners, but sometimes the partners says no, we can not because it says here that we are obliged to cover full damage costs to E-ON if something happens and we can't.

TG: So like, you are going in...

GB: Sometimes we say no, and we can't match that..

TG: So you regulate the relation through a contract and the contract also makes the risk less...

GB: Yes..

TG: This is like a general approach...

KM: Yeah but also, you spoke before about you did like a risk analysis with external people. Do you have, many companies, as we have studies many companies they have like a risk mitigation step by step guideline. Do you have like, or not only E-ON.. like general ?

GB: Aahh..

TG: Not addressed in details..

KM: In general perspective you have dealt with such thing like that we have this, this and this have to be covered in risk mitigation guidelines...

TG: Considering IT..

GB: Actually we have a computerized system called LISA.. aaa. I think I have to draw (walks up to the whiteboard and starts to draw). LISA have many different parts. But it all starts with an Inventory. And in that inventory we have all information systems..

TG: Mhm..

GB: We also, besides inventory have infrastructure and processes – business processes. For those different parts there are a lot of attributes but when you do the inventory for information systems, you start to give some base information. The base information is basically - this an accounting system, it's running on a Microsoft platform on some server and it is hosted in Malmo and the operational responsible is E-ON IS. And the technical contact person is a name. The next step we have after entering the base information is that you do an how you call it.. evaluation and classification. And the classification is ah..: confidentiality, integrity, availability and crash ability . Each of those are valued in five different levels. From not important to ...

TG: ...very important..

KM: .. very important..

GB: (laughter) not exact, well, very important yes. Ahh, the next step, when you done that evaluation is to ahh, kind of quality evaluation of a service, where we see if there is an interruption, how much would it cost? So, downtime cost. And that is per 24 hours and week. And the next step is to say eh.. the frequency of past downtime. When you have those... this information.. that forces that two things happen: requirements, security requirement is generated, so according to what I have said and its paid most value to the (points on whiteboard) and a little bit to the (points on whiteboard) that generates the security requirements and they are kind of into different parts: it is from backup, what backup requirements you should have, what kind of authentication solutions should have and logging requirements and requirements of which computer center is allowed to place it, service time, how often are you allowed to have service windows, how fast the technicians can be on site and regimentations for that. That is one thing that is generated, there is also generated an... how we call, base risk analysis. That is three, if any of those are higher than three (on) average, if any of those are higher, that one will be opened as next step and there are twenty five scenarios... and they are divided into...

TG: the same categorization..

GB: the same categorization. And they are forced to do at least three scenarios within each of those.

KM: really difficult..

TG: This is really difficult.. then you can be sure.

GB: (laughter) And the result of that is the common, you know, you probably seen it in the literature..

TG: the risk matrix..

GB: yeah, the risk matrix.. Is something there in this corner (picking on the whiteboard), you like have to take extra mitigation and do a deep risk analysis (picking on the whiteboard), and there is one more thing i haven't..

TG: Yeah, ok, we get it.. The info system is the most important.

GB: As well, but the infrastructure they have actually a pack which is taken from that model so we have an inventory of services but the services here is not that of services that you think of. Services here are like we are very dependent on a service provided by Nordpool. If the Nordpool is the stock market for electricity in all Nordic countries and they provide the current stock courses, or rates and that is a very very important service for us to have. So more or less the service is here, we have the base info, but we know we can not make any influence on Nordpool. They dictate... we provide this, take it or leave it, if you don't wanna use it, then you can try to be on your own, it is hard to do deals

(laughter). So.. if.. but what he does by having this value (points on whiteboard). It puts... It puts... some demands on kind a, like this, because...

TG: Yeah..

GB: if we have a very very high rating here (points on whiteboard) and it is depending on some kind of a infrastructure..

TG: Mhm..

GB: It will raise the demands.. on the classification of availability of the infrastructure... a bit complicated..

TG: Ok... that's ...

GB: In the science system as we call LISA Ledning Information System Aplikation we also have a plan and that is basically only at the moment continuity plans that we have there and the idea is that we could keep all kind of plans but its have been made that we have the... aaa... jaa... As I said, this is automatically generated the requirements but sometimes for some reason you are not satisfied with the requirements that are generated I think... thirty something different requirements we will get. Sometimes you think it is to high, sometimes you think it is to low, You can then both ehm.. those requirements have to be accepted but you can both raise them, lower them or keep them as it is. But if you lower or raise them there will be an deviation that goes into deviation model (sketches on whiteboard). So we have a special, eh.. module that takes those and puts it into there and here it has to be accepted by the.. eh.. information, security responsible.. of that company. There is one at each company and have to take in an "Ok".

TG: Ok..

KM: Yhm, this LISA...

GB: So, this inventory here, is done by business unit that is going to buy this application and use it and do all the... and the system provides them with this (points on whiteboard), that is more or less deal I call it that has done the work and when the deal is changed it has to be accepted by the person that is responsible for security at their company..

TG: ... mhm.. So you have someone at Logica that has to do it, for example, like when you...

GB: Ah.. well in one case actually one of our subsidiaries there is a consultant that is holding that role..

TG: .mhm..

GB: ... but in all of it, that is someone that is employed and aaa... it doesn't have to be a security specialist. Yyy.. but we wish it to be at least... (phone starts to ring, talks on the phone, goes out of the room).

TG: So aa, I think we covered...

GB: So, I would say we have a very.. aaa.. very structured way to work with risks, I mean to work with risk management department, and aaa to give You a little hunch of who we deal with it... I am working where two people working with information security, just information security and we are responsible for laying the strategies for how to work with information security within E-ON Nordic group..

TG: ..mhm..

GB: ...and to provide tools like this one (the one sketched on whiteboard) and to help the subsidiaries and their own, because its legally different companies, therefore they have to have one person at each company that are responsible for security at that company because I can not take that, because legally I am not employed by them. But I can help them and I can give them good advice and I can be the one that is a little bit hard and pushing and say: hey, you have to do that, I have to have that report in that time and being a little bit of a..

KM: And this was this LISA, you said, it was mad by E-ON by your company or you outsourced it and they made it for You?

GB: No, it's build by a company called Ifax..

KM: Oh..

GB: ...yyy here in Malmo but it's developed more or less from our requirements..

TG: ...ok..

GB: ..and it is hosted right now here in Malmo but actually we are going to move it to England within a few weeks..

TG: Ok..

KM: Ok..

TG: So, I think we covered everything..

KM: Yeah...

GB: This is kind of to illustrate what the issues you are dealing with here, when we doing that move as a hard requirement I said, it was a go no go meeting yesterday and I said No. Everyone else said yes, but I said no, because they had an issue with encryption, so when they tried in the tests, because I said as a strong requirement when move it even if it's within E-ON, the database has to be encrypted and the communication between us and the server in England has to be encrypted because is going through the European backgrounder and every E-ON company has access..

KM: Ok..

GB: So, and this is sensitive information for us, because basically here are the names and every information system that we have..

TG: ..mhm..

GB: ..its description what it do, its... who is responsible for it, what is the technical platform it is operating on..

TG: ...yeah...

KM: So there is a..

GB: ... so (for) a penetrator this system is a goldmine. I mean if I was a hacker and I got my hands on a system like that (laughter)

TG: The you would be rich..

GB: Yeah, Christmas eve! (laughter) So this is a very high classified system for us.

KM: So but the thing is that, with the other company that made this for you, you have a huge deal ann trustworthy deal, because if this is so important to You, you should have..

GB: Yeah, but on the other hand they don't have the information..

TG: Oh..so they just..

KM: Oh, so they don't get information..

GB: They are programming the system.

TG: Aha.

KM: Ah ok, you enter the information.

GB: We enter and its distributed, that's kind of nice thing I can say with it, because sometimes in large companies you tend to think that security is the security's department. It is their responsibility and they have to deal with it and now it's not. Security is everyone.. everybody has a security responsibility and everyone has to work and follow the rules that we have and work in a secure manner and that goes both to physical security I mean we have those cards, tills, locks and so on and through our information IT security. So that's very important to have, yy.. the same kind of yy.. way to look at..

TG: Yeah.

GB: I mean everybody knows that they have to be careful with a company's key that they get and when they get a laptop and a password they have got a big key to our network. That is what we actually give 8000 employees... 8000 people here. But there is only 5500 that I am aware...

KM: They should say if the loose it or something...

GB: yyy that's a whole other thing. That is the next station for you guys..

TG: Alright so..

GB: It is worth to have a ... that is one thing you could have.. to have a incidence management processes and incidence management responsibilities in your contracts when you are doing an outsourcing deal. Because incidence will happen and one thing that is very important that you think of from beginning is what kind of requirement of proof do you have. The proofs are to 90 % logs..

TG: ..mhm.. ok..

GB: ..if it is very important for you that you can investigate in detail what has happened you have to have high requirements on logs and how long (they) are saved. The company that I mentioned before they had an a larger hacker attack and it turned out that they had access to their network in three years..

KM: Oh..

TG: Mhm..

GB: The hacker is convicted.

TG: Yeah.

HM: Hm, they found him?

GB: Yes they found him cause he tried to blackmail them.

TG: Mhm.

GB: Yhm, cause he stole some information and tried to blackmail them but with the help of SAPO they managed to get him. So he is currently in prison.

TG: Ok..

GB: But it illustrates that, you, is not enough to have a daily log or whatever it is because an attack is that wily one duce. If you are a target you can get, skip the script kiddie kind of, there are no firewall and a 30 days log shock you can get rid of, but if you are a target company you can assume that some group will really like to get hands on your information then you must have much longer perspective, because they work silent, and they work very on a goal based and they dig all. So it is not a two weeks timeframe it is a year.

KM: Oh..

TG: Oh yeah, thank you for your time.

## **Interviewee E - Anette Ringnér (Logica)**

Interview duration 32:58 minutes

KM: Konstantinos Mertzianis

AR: Anette Ringnér

AR: This, this is exam? For an Exam?

KM: no, no it's for our thesis, it's for our Master thesis

AR: oh, ok

KM: we are finishing the Master program in informatiM

AR: InformatiM, ok.

KM: and in Lunds University so yeah we... I don't actually think... this is the topic (showing the topic of our thesis)

AR: yes, I've seen

KM: It's about offshoring and domestic outsourcing or... there are many, many ways to...Eh... can you tell us before we start, can you tell about, can you tell me about your background, in eh general?

AR: In general?

KM: yeah, haha

AR: hahaha

KM: If it's possible, like, because we do the same question every time we interview.

AR: ok. At the moment I'm a business unit manager

KM: yep I know that

AR: yes, for the software area

KM: hmm

AR: and we have some own products, software products in Logica

KM: yes

AR: and we have eh we have 5 or 6 units in that software areas

KM: developing software...

AR: Yes we are developing software

KM: ok

AR: and I'm the, responsible for the developing of public, for the public...

KM: sector?

AR: yes

KM: oh, ok ok. So these software that you develop you give them, you sell them to companies or is it... but you're, you're for public companies, like public sector companies

AR: hmm, hmm

KM: that's what you do?

AR: yes

KM: ok

AR: of course we sell them

KM: ok, haha

AR: we don't give them away

KM: Ok, so in some way those companies are outsourcing to you, right?

AR: eh... no

KM: or buying from you?

AR: It's not my responsibility because what we are doing here in the outsourcing we are outsourcing the development

KM: oh, ok that's eh... oh the development of these processes, right?

AR: yeah

KM: these IT processes

AR: yes, development and test

KM: ok

AR: test process

KM: hmm, ok so eh... is it important this outsourcing unit for your company?

AR: yeah, yes it is

KM: and eh... do you outsource it outside of Sweden or...?

AR: in India

KM: In India, ok. So, because the other, the other Logica in Botufs, I can't remember, they outsource in the Philippines. So it's developers in India and eh...

AR: yes, in Logica we have... we have the Philippines, we have different countries, that we have offshore

KM: yes, but the IT processes is mostly in India?

AR: the I... if you mean IT, IT is everything what we work about here in Logica. So for us if you see the area of eh of software

KM: yes

AR: we are outsourcing the development and the test process

KM: yes because, the... my mention about IT is because eh in the other Logica the process that they were outsourcing was purely secretarial work

AR: ok

KM: like checking the... the mail and doing the OCR, it wasn't something like developing or project management, or something like that, that's why I mentioned it.

AR: ok, ok. If you see Logica globally we outsource our own IT, so if I want some help with my computer or software or something, I call India

KM: ok

AR: so... but it's not my responsibility because it is Logica global

KM: eh... and you do not outsource such processes eh in Europe for example? Or inside Sweden, domestically?

AR: if we outsource domestically?

KM: yeah, it's like you outsource this process, the development process, you outsource it in India.

AR: yes

KM: Ah... You could... some companies, because that's our study, eh... they outsource it inside Sweden to another company

AR: ok, no

KM: which is... can be cheaper or something, you don't do that?

AR: no no

KM: a ok

AR: we have Logica; It's a Logica company in India, so It's our own.

KM: ah, it's under the Logica...name

AR: yeah

KM: and why did you choose India?

AR: because it was there, for us;

Km: yeah

AR: we eh... we eh... it was Vemdata until 2006

KM: you started on 2006, you started outsourcing there?

AR: Yes, Yeah, and then we become a Logica part and Logica has this outsourcing company or resources in India

KM: hmm, so ah... the whole...

AR: the Log... it was a Logica globally decision to, to eh say what we can do, offshore instead of onshore

KM: why, why did you start that venture back then? Do you know why? For example in 2006?

AR: I, I can't say from the global perspective, from my...from my

KM: from your perspective, yes

AR: From my perspective, we eh... we were going to start a new eh development project, a big one, with about 100.000 hours, so we didn't have the resources here, so eh it was combined with cost and eh... that we needed more resources

KM: so, so the main reason was cost savings?

AR: no, as I say it was two reasons, cost and resources

KM: cost and resources, ok. And are you up to now satisfied with eh... what is going in India, how is it going

AR: yeah...yeah

KM: the outsourcing, because there are a lot of risk factors when, we will go to that afterwards; ahh... but until this point are you satisfied generally?

AR: Yes I'm satisfied,

KM: with the... ok, and eh... when you say you outsource your developing process, can you be a bit more specific about what is it? Like, is it something that is knowledge for, for Logica or is it something that is like everyday work eh that is not so ahh... special for you? For example if you lose it then you will have a problem; or is it something that it's like everyday work, that's why you sent it to India.

AR: Yeah but you can, you can.... It's both because what we do, we eh... we, when we started it was really important to handle, handle a transfer project and what... the main, the main focus, that's the thought was the competence, the competence of our business

KM: yes

AR: for example then I was, a eh... a manager for the utilities

KM: oh

AR: and then we had also to learn about the...the software was... the utilities, specific details about utilities also to learn about; so it was, eh you had to know the programming of course; but the programming itself is general

KM: yeah

AR: yes, so that is eh more like bread... what you say bread... bread and butter, haha

KM: ah bread and butter, ok so you started it from here?

AR: yes

KM: and you went it over there?

AR: yes, yes we have done so with several products. In start they come here, at first they are here a couple of months and learn about the process and the business

KM: and is it mostly eh... Indian people working...

AR: yes

KM: ...there and there's like a consultant or a manager going back and forth from Sweden, in order... or is there like a head there that communicates every day with you about reports and problems and...?

AR: yes, when we... at start, the... at start there is not the manager that counts this, the programmer who comes here to learn about...

KM: so they come here, you don't go there?

AR: no not in the start

KM: not in the start

AR: no

KM: ok

AR: but after when we have transferred it to India to Bangalore...

KM: yes

AR: we eh... I think in the most problems we have sent two, one-two guys, eh... to see that there is running.

KM: oh, ok. And now we go to ah... the "risky" part of our thesis, ah... do you firstly, do you consider outsourcing a risky process in general, from your experience not only from Logica, general do you consider it a risky process? Either it is inside the same country or in Europe, either it is in India, generally.

AR: Eh... not I don't think it is risky now; but when we started I thought it was risky because we didn't have the knowledge about it, how to handle it and how to approach it; now we have a lot of experience, so I don't think it's so risky now. We have... we know what to do, we know how to set up a transfer project, we know what weakness, what the weakness point is; so it's not so risky now.

KM: but can... you have considered some eh... can you tell me about when you started it for example, because now you tell me that it's not so risky for you; what was, which was the risk in your starting venture to go to India? Did you do like a risk analysis? Like we have this-this-this might happen?

AR: yeah.

KM: can you, can you tell me in brief...

AR: I think it's everything you have...

KM: it's everything?

AR: yes-yes!

KM: ok

AR: about everything... no it's not everything, it's not all; we didn't see that big risks then, eh... but we had of course the culture

KM: the culture, the difference between eh...

AR: to communicate and to understand what eh...

KM: and also the time difference? Or is that a "help", because when you go to sleep they go to work?

AR: Yeah, we didn't, we didn't thought this as a, as a risk no, no and it all worked out, well so eh... I don't think it's a risk.

KM: ok, and do you consider eh... like for example risk probably in the beginning losing some of your knowledge; I will explain, cause we read some articles from other eh... scientists, you can call it like that, about IT outsourcing and there was an example from this company, Deloitte, they had outsourced their IT unit in India and what happened was that they outsourced the developing process eh... but it was specific, so the developers there which were educated people, though Indians, eh... they wanted

to... they just, they got bored after a while so they complained to the managers saying “no we want to work, we want to do something more productive” so this general complain ah... went to Deloitte in the headquarters, so after meetings they decided to let them develop more the process and what happened in the end is after developing their, the process which went well they sold out, the Indians and Deloitte company faced a... an economical crisis you can say, because they lost most of their employees in India, which opened their company based on that knowledge.

AR: ok

KM: so do you consider such a... such a risk...

AR: but this is a Logica company that we are..

KM: yeah, yeah it was the same but the people... ok the work under Logica but if they want they can retaliate or not or something

AR: yeah, yeah

KM: Do you consider that as a risk?

AR: No, not exactly as eh..., but there is a risk because eh... you have ah..., you have a hanger on setting for personnel

KM: yes

AR: you know, for personnel, so there is a risk to lose competence in that way

KM: ok, but do you mitigate it like through, through special contracts, through special SLAs and...

AR: yes we... we will look on that but we don't have it now; a special contract, no.

KM: ok, so ah in general there is like some way, when you eh... employee Indian people, who is the one, who is the HR that...

AR: we have an HR in

KM: makes the decision.

AR: we have an HR in India but we also eh... we also participate in the... the recruit process; so we have eh working tests that we do in Sweden and sent to them so they do this, the test, and we also have an interview with them and so on

KM: hmm, so and eh... for example when this person comes what is like the most important part that you focus on in order to be sure that nothing wrong is going to happen like such situations or haven't you considered something like that?

AR: the first is the competence; to see if mm... they past their work test

KM: hmmm

AR: it's the first thing and then we have the personal interview to see...

KM: hmm

AR: eh.. it's like Sweden

KM: oh

AR: it is eh... we will have the same process as in Sweden, it's important to have the right guy for the right...

KM: yeah

AR: ... job, so

KM: but you don't like feel, eh... because eh in India for example there's no protection as we studied no law protection about hacking

AR: no...

KM: they consider hacking that is not a crime there; ah... or generally the... the laws are more ah... how can I say it ah more

AR: moderate?

KM: moderate eh... in contrast with Sweden

AR: hmmm

KM: so does that affect your outsourcing unit? No?

AR: no, no that's not what I think

KM: so you haven't any, any problems?

AR: no, not... not with hacking. No.

KM: ok

AR: no

KM: ok, ah...

AR: not where I work, hehehe... to mention

KM: can you probably describe any incident that has happened throughout these years that you are working in outsourcing that you probably have considered as a risky situation?

AR: Eh... yes, risky situation is that when we eh... we have, if you have a big development project and it's, we depend on the time estimate is right; so that we speak to some language it's in time when picking it up, when we, we need developers in eh... India to specify an estima... estimate the time for

the project eh... that can go wrong, if you don't speak the same language because If you... if you don't eh... in India for example the first time they dd... they estimate time for investigation, for eh... for meeting, for... only for hacking code

KM: oh, ok

AR: so, so eh...

KM: so it's like eh... for example...

AR: it went wrong

KM: it went wrong

AR: yeah

KM: If like there is a different, eh... like way to think, for example the Swedish people as I've seen it they, before going into a new plan or a new venture they have meetings and meetings and all that stuff

AR: hmmm

KM: The German people are more, more not so... they don't like meetings so much, ah and the Indian people you just told me they were into the hacking of the code ahh... did that difference in the cultures between the two countries...

AR: No I don't think that that is differ, differs... that it differs when they estimate the time, they go to meetings and they have how to specify more and they have, had to eh... have a... investigate, analyze more before starting to actually do the code but they didn't estimate, estimate the time for it.

KM: oh, ok

AR: so it's, there's no difference in the way of work..

KM: it's just the time limit,

AR: yes,

KM: it doesn't go

AR: they didn't count the time for doing that

KM: oh ok

AR: but they did it

KM: but they did it

AR: yeah

KM: eh and are you facing that continuously or this happens like once in a ...?

AR: Yes it happened once, and then we had...

KM: then what did you do to mitigate it?

AR: yes, we need to have a meeting about it and discuss it, how do we do it

KM: oh

AR: because we must understand each other

KM: ok

AR: so when we'll have the time estimation for the project we need also the time you save for getting more analyze eh... getting more in, in documentation, specification and so on

KM: hmmm, ok. Ah....

AR: it's important to communicate, hahaha

KM: yeah that's, that's the, the thing that I'm going to continue on about...

AR: it's the most important thing

KM: so, yeah communication eh... between eh... for example in that company, in a simple company sometimes there's a problem when the officer that is one floor down, eh that previously he was communicating with his boss which was in the next door now he has to communicate three floors up and sometimes you see a problem in that; is there a problem between communication that it's like billion miles away, in India?

AR: it was in the beginning but we have learned, eh... we also have implemented as ground agile method about developing; so you have enough eh 30 minutes eh meeting every day, standing up cause it shall be short

KM: ohh

AR: so you just go through; is everything on plan what you do and so on, so we have these 30 minutes meeting with India every day.

KM: so you do that... for example in what time does that happen? Because there is a time difference.

AR: in the morning

KM: in the morning?

AR: hmm

KM: so but they work at night?

AR: in the morning they have... it's the time difference at, in the other hand, so they

KM: ohhh

AR: in the afternoon

KM: the afternoon, oh ok so there is no big problem with the... time difference  
AR: nah, no  
KM: ok, eh... so that's how for example you mitigated the communication issue?  
AR: That was?  
KM: you mitigated the communication issue  
AR: yes, yeah  
KM: ah... because communication as we've seen so far from....  
AR: it's the most important  
KM: ... other, yeah it's the most important  
AR: yeah, yeah. And also ask if they say yes I can do it, ask again it's really sure, do you have understand the...  
KM: do they eh... before like going on a new program, like a new developing ah event or something, do they have to sign something or specific paper that we have understood what we're going to do eh... according to the Swedish Logica that gives us the orders and...  
AR: but you have, not, not we don't sign, but you have sort of signed, signing when you, you eh if you make... sometimes they do this specification and then they also do the time estimation and they say to us: "yeah, ok this will take about 20 hours"  
KM: hmmm  
AR: and then we follow up that this, there is a sign of what it will take in time, but we don't have any other...  
KM: any other guidelines...  
AR: no  
KM: ok, ok. Eh... and now a general question is about the economic crisis that is going on now, about a year, eh did this outsourcing venture that you started like 2006 or 2005 I think has helped you now with the economic crisis? Or didn't you get anything from it? Because a lot of companies while the in the economic crisis, they lost a lot of employees or they made redundant a lot of people; ah with your outsourcing did it help you overcome some problems? Some economic, financial problems?  
AR: No, it just... this transfer project as you know if you have spoken to Anders is a project that started 2006 and it's ongoing, so it's, you can't say that, you can't compare the economic crisis with our outsourcing because we should do it anyway.  
KM: yeah but imagine for example if you didn't have it the outsourcing already, so you were Logica Sweden... what would have happened, did it help you? Did it ah like offer some ah... assistance?  
AR: The budget we have is based on that we have the offshore, so I can't compare if we didn't have them; so of course it's eh... it's cost reducing when having the outsourcing, eh... of course it is but you can't say that offshore business have helped us in the economic crisis now.  
KM: oh ok, so exa... another thing about the economic crisis is what went... did you loose more financial savings in Sweden or in India? Which country did it affect more? Because you're... the IT ah development process makes some money for... for Logica right?  
AR: hmmm  
KM: so where did you lose more, as I can say it more simple, in Sweden or in India? Did it affect more India, because it's Logica there also or here?  
AR: but the economic crisis it don't, it... it eh...  
KM: because it's under the same "name", that's why eh... I'm asking. It's under the same Logica here and Logica in India.  
AR: I can't... I don't know, I can't compare, compare where...  
KM: where it went more, more what?  
KM: ok  
AR: no, no  
KM: ok ahmm... ah... another thing is what you consider as a critical eh... success factor when choosing ahh... in general, this is a general question about outsourcing,  
AR: ok  
KM: for choosing a contractor, ah... like but you did that in India it was under Logica,  
AR: yeah  
KM: but general from your knowledge, when choosing a contractor to outsource what is your ah...  
AR: I haven't been in that situation so eh..., eh... what is critical is that they are big enough because as you, as you said about the abou deloi.. the one there they... because I can see we are so many many people in Logica so if you are only 20 you can't, I hadn't sent my business offshore if they were only 20 ...  
KM: oh ok  
AR: ... people, it's eh...

KM: ok so you consider that for example India people they have a huge developing, eh good programmers

AR: yes

KM: in India

AR: developers certainly also have, they have HR, they have processes, they have eh insure quality

KM: call centers and stuff like that..

AR: yes, so this is a professional business when you are in that size

KM: oh ok. Ok and eh... mostly I have finished, this is a general... the last question would be like what is like your eh... your general way to mitigate the risk? It's a question to finish

AR: ok ok

KM: we have different... this is a really funny question cause from every person we have interviewed there's something different .... But you told me that you don't have risks now, but back then

AR: it's also risky but we are aware of the risks now, so it's... don't say, we don't feel like it's a risky project. We are more, we have experience now about what is the weak point, what we'll do for avoid eh...

KM: so you have done analysis beforehand like 3 years ago so now you can

AR: yes because we have... because for, we have 3 years experience now so now I think it will not be eh it's not the feeling of a very risky project to transfer the development to India because we have done it several times now, so eh... but the, the general way to... I think the best way eh is to, is to really be aware of, you must have the, the "really" planed project for transfer something to another, not just another eh... eh company or something, to another place, so...

KM: it doesn't matter if it's in India or the Philippines

AR: no, no no. You must have a plan

KM: ok. And when you made that plan was there like ah risk analysis or you did like a huge...

AR: yes because this was from project, because sometimes you want to, maybe you want to move a whole product, software product

KM: hmm

AR: or maybe you want to eh...eh just move eh... a bit of eh maybe module or something that you have all that you have to maintain and so on. So this was controlled but you must be aware of, of eh what problems can be because if... our experience is to move the old eh... often business, built with business competence, is not so good; rather to move some new developments, at the same time built up competence and move the new one instead

KM: hmm

AR: or transfer old, old, old code old module or competence

KM: hmm, ok eh and something that just came up, to finish off the interview, when you did outsourcing in 2005 or 2006, 2005 I think; did you ah face any redundancies here about employees?

AR: Yes we must be aware that it will take some extra time to transfer you need both, you need a task for communication, so you must have the knowledge here at the same, same time we have the knowledge in India for, for eh a couple of months

KM: yes

AR: so then you handle redundancy

KM: yeah

AR: but you have, you must plan for that

KM: yeah ok. What I... what I mean eh is that... did you had to fire some people eh here in Sweden because you found cheaper labor in India?

AR: not, not in the process that eh I've been responsible for, we haven't fired anyone

KM: oh, ok because eh for example even if you not you don't fire some people when big company's go to ventures like offshoring eh and eh the employees know about that they fear about all and they think "they 're going to fire me" so they are less productive; did you face such a problem?

AR: eh, yes I could feel some fear about eh... not about are they going to do the fun part in India and we are only going to do the

KM: hard part

AR: haha, yes, haha

KM: ok

AR: no not only that, but is... it was I said in the beginning if you have eh, the reason was not just to reduce cost it was to, we had we standing for much more bigger projects, development projects, we did not have the resources here for doing that...

KM: oh, ok

AR: so

KM: I get it

AR: yeah

KM: ok, right thank you that's it.

AR: ok

KM: It was more than enough and ah! Ehh have you filled in the, this questionnaire?

AR: oh ok you want me to fill in here?

KM: yeah, it's a... I can explain how you do it. You don't have to do it now, you can just do it and mail it to us

AR: ok,hmm

KM: You have it also in the computer right?

AR: hmm

KM: You just put these risks in numeric order from 1 to 15

AR: 1 to 15, ok

KM: which you consider most important

AR: hmm, hmm

KM: it's just like a survey-questionnaire, simple questionnaire we're doing

AR: oh ok, ok

KM: and if for example you find something that is missing, we haven't mentioned, we'll be glad to... to see it

AR: hmmm

KM: if you want

AR: ok

KM: ok

AR: I'll do that, I sent to you

KM: ok, whenever you can and when we transcript the interview

AR: hmm

KM: ah would you like ah to sent you a copy?

AR: yes, yes

KM: ok that's it

AR: thank you

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