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# Managing the internal IT function's changing role when outsourcing

## Abstract

This thesis investigates the changing role of the internal IT function when IT services/capabilities are outsourced to one or more external vendors. More closely we analyze how the process of outsourcing affects several dimensions of the IT function, such as strategic alignment, organizational structures, governance, innovation, capabilities and vendor management. The chosen method is of explorative/inductive nature and the selected research approach is in-depth qualitative interviews with nine different companies within a range of different industries. Our findings show that for a successful outsourcing outcome, a large degree of management's focus and attention must also be put on handling the internal IT function and its people and processes. Business orientation, leadership skills, sourcing skills and the ability to create a trustful relationship were all crucial factors. Standardization and formalization of processes were concluded to be prerequisites when outsourcing, but also reduced the company's flexibility and innovation capacity to some extent. The contract and service level agreements was found to only be factors making the outsourcing possible, but not making it a success. A challenge that IT managers need to pay extra attention to is to know what processes and capabilities to outsource. Loosing critical competence was a major risk that many managers faced after the deal, resulting in confusion and poor performance. The thesis also found that the organizational structure, including the forum structures, did not tend to change in any significant way. The reason was identified as a willingness to reduce the transitional risks that an outsourcing deal brings along. Furthermore, it was only in a few cases that the organizations had implemented new roles and functions.

Key words: *Outsourcing, IT function, Vendor relationship*

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# 1. Introduction

As information technology and information systems have grown in importance, company's IT departments have equally grown in size. In the early 90's most organizations had started to think about the alternative of outsourcing their IT departments. The drivers for using outsourcing were mainly the notion of core business focus and finding a way to handle the increasing complexity of IT. But outsourcing could also be considered as part of a much broader transition in management trends at that time. The once so popular diversification strategy was at that time being abandoned and replaced by core competence focus (Lacity & Hirschheim, 1994). Since then, more and more companies have discovered the benefits of letting an external outsourcing vendor deliver some of the IT services to the company. According to a study, more than 50 percent of all firms are expected to use IT outsourcing in 2006 (King, 2004).

During recent years low cost countries and emerging markets such as Poland and India has been utilized for outsourcing, lowering production costs substantially mainly due to lower salary level. Although it is easy to argue for the positive effects of outsourcing, the rational behind outsourcing has been questioned by many. Despite the vast attention on the area and the large research carried out, company surveys show a big disappointment (McEachern, 2005; IACCM, 2005). The estimated values and benefits have not been realised as planned. Some companies have even reversed and *in-sourced* parts of the IT organization that was once outsourced. Outsourcing has shown to be a complex process, involving many stakeholders and a lot of need for change management. There are many theories to why outsourcing fails to deliver upon the promises. While such deals are usually important initiatives requiring a lot of attention to the choice of vendor, what services to outsource, setting up new price models and defining service level agreements (SLA) the IT function left in-house and its new role is not discussed to the same extent in the research literature. So the question of how the internal IT function should be managed during these kinds of transitions could from this perspective be highly valid for the outcome to be successful.

## *1.1 Problem statement*

When conducting outsourcing of IT services a lot of attention is put on what services to outsource, to whom and how the agreement should be designed. But changes will also reflect upon the internal IT function left in-house who needs to set demands, buy services, interact and follow up on the vendor in order to secure the delivery of IT services to the business.

## *1.2 Purpose*

The purpose of this thesis is to investigate the following question:

- *How does the internal IT function manage its changing role that is caused by outsourcing of some of the IT services, and how does the role change?*

## *1.3 Delimitations*

This essay will only consider the aspects and changes within the internal IT function and not other changes within the company, such as changing roles and structures within operations or business development.

## *1.4 Definitions*

| | |
|---|---|
| ***IT*** | Information technology refers to the application of computer, communications and software technology to the management, processing and distribution of information |
| ***Outsourcing*** | Handing over parts of an organization's IT services to one or more external service providers, who afterwards delivers these services to the company based on a contract |
| ***IT function*** | The department or organization for handling IT issues within a company |
| ***IT architecture*** | The fundamental organisation of systems, its relations to each other and to the environment |

# 2. Methodology

In this section the practical procedure of the study will be presented. The different choices made should be evaluated with the aim of the study in mind. The purpose of this section is to enable the study to be replicated and also to be a part of the evaluation of the final product.

## *2.1 An Explorative Social Constructivist approach*

All scientific research derives from a scientific approach. There are two main directions, positivism and constructivism. The two approaches represent two different views on reality and "the scientific truth", thus also affecting how research is conducted. The scientific approach is therefore affecting large parts of the study, which methods that are chosen, the analytical process and therefore also the end result. The researcher's world view is, according to Brunsson (1981), often decisive for the researcher's choice of study and research approach.

This paper is based on the assumption that reality is socially constructed. In other words, the presumptions and theories through which people filter reality are constructed by their subjective and inter-subjective view of the world. It is therefore not possible to create models, which fully represents reality (Davidson & Patel, 1994). Constructivism also believes that one specific incident can't be isolated from its context and that a person's impressions and impression are created in a social context. People are in that sense not objects, but subjects, who themselves are involved in creating their knowledge.

There are several ways and starting points from one can conduct research. One part of the scientific research is to generate hypothesis and new statements, in other words, generate theory. This way of conducting research is called induction. Another way of conducting research is to use a deductive approach that starts off with an existing hypothesis and then collect empirical material to either support or reject the hypothesis. (Backman, 1998) Since specific literature around our investigated topic is scarce and our aim is to answer the question *how,* our study can be labeled as explorative/inductive. In this thesis we have

chosen to work with an inductive approach where we wish to find new knowledge in a sub-area, which we do not believe is covered theoretically today.

## *2.2 The Data Collection Process*

At the base of a scientific study one can find both primary and secondary data. The primary data is first hand data, collected by the researcher himself/herself and can therefore be specifically adjusted for the purpose of the study. Secondary data is data that earlier has been collected and processed by other scientists. Backman (1998) belives that it is important to study literature and other research within the field to secure the quality of ones own study. This data is preferable collected before starting the new study since it can make it much easier to find the focus and specific area, which one wish to investigate. Secondary data is often relatively easy to access but are seldom totally adaptable to the scientist's specific purpose. We have chosen to use both primary and secondary data in our thesis.

When writing this thesis we have used primary data consisting of in dept interviews with nine companies where we have primarily interviewed CIO's or persons with similar responsibility areas. The analysis in this paper has mainly been based on these findings. Before we started to collect the empirical material we made a thorough theoretical search within the field, collecting information in the forms of books, articles, models and best practise publications from IT consultancy firms etc. This information has been gathered through the use of the school library, databases etc. Besides helping us to narrow down and prioritize the investigated field of this thesis a selection of these theories became the foundation for the theory section.

## *2.3 Interview Methodology*

In this section we will present the way in which we have conducted our interviews and also the justifications for the choices made during this process.

### 2.3.1 Qualitative semi-structured interviews

Since we have an explorative approach and want to leave room for new findings in the area studied we conducted qualitative interviews. The qualitative method should be used

when there is a need of penetrating a given problem to answer questions like “how” and “why” (Eriksson & Wiedersheim-Paul, 2001). In an ideal world, qualitative interviews give the participants the opportunity to describe their experiences and reality with their own words. The interviews should therefore be conducted in such a way that allows for spontaneity so the interviewee feels comfortable and helps the researcher understand the world of the interviewee. (Kvale, 1997) Although fully “open questions” can be useful we wanted to avoid the interviews becoming too scattered. Therefore we created a semi-structured questionnaire (see Appendix 1), thus making it easier to compare the different respondents with each other. The questionnaire functioned as a discussion template and somewhat of a check-list.

### 2.3.2 Pilot test

Before going out and conducting the interviews we conducted a pilot interview where the semi-structured questionnaire was tested. We felt this procedure to be important for ensuring the quality and clarity of our questions. By doing a pilot we also aimed to limit the possible implications that we, as interviewers might have on the answers.

### 2.3.3 The selection criteria for the respondents

When conducting a study that aims to generalize and find trends in the population, a statistically significant amount should be randomly selected from the target population. Although this is preferable, it is in reality seldom done possible due to the cost and large amount of time that is necessary. Since total generalization is not our aim for this thesis we have primarily used so called “cold calls”, starting of by contacting companies at the Swedish stock exchange’s A-list. The later stage of our selection process had more the characteristics of a snowball selection, where we contacted and interviewed companies that were a part of earlier respondents’ network and also some companies which we were told to look positively upon helping students.

### 2.3.4 The quality of the study

Verification of knowledge within the social science sphere is usually put in relation to the terms validity, reliability and generalization. For all data collection processes it is important to get an idea of how well they actually measure what they claim. Validity and

reliability describe how well this process is carried out. Validity is measured in terms how well suited the sources are to answer the research question. The term reliability refers directly to the actual gathering and how dependable the data is. A high validity and reliability should always be sought after. (Kvale, 1997) In a study with a quantitative approach, issues' concerning validity and reliability is a constant process. Validity and Reliability in studies with a quantitative approach is mainly an issue of describing how the data was collected, and that it was processes in a systematic and honest way. In a study with qualitative approach validity and reliability are touching both the collection of the data but also the following analysis of it. Good validity and reliability are prerequisite to be able to generalize the results so that they also can be told to be true for other than the investigated. Below we will take a closer look at these concepts in relation to our own thesis.

**Validity**

The concept of validity can further be divided into two; intern validity and an external validity. To gain a high intern validity we tried to give a thorough presentation of our procedures and in the method chapter described our previous knowledge, how we have gathered our data, the selection process and also the analytical process. (Kvale, 1997; Malterud K. 1998: a) This can also be called communicative validity and our aim is to make our writing and empirical gathering process as transparent as possible for the reader. The external validity of a "qualitative thesis" is to a great extent decided by the reader, who has to decide whether they believe the results are possible to generalize or not. (Malterud K. 1998: b)

**Reliability**

Since this thesis has a qualitative approach the reliability is much reflecting the quality of us as researchers. Usually studies with a qualitative approach look upon technical devices and humans as instruments. Both need therefore to fulfill its task in a reliable way for the research to be dependable. (Kvale, 1997; Malterud K. 1998: a) In strive for high reliability we have been thorough when conducting and documenting interviews, the majority of the interviews was held face-to-face and all meetings have been carefully

documented with direct transcription, comparative notes. Complementary questions have also been sent to the respondents when clarifications were needed.

### 2.3.5 Prior knowledge of the subject

When conducting a study it is inevitable that the authors' prior knowledge and experience will influence the assumptions and conclusions presented in the study. Therefore we find it important to include our background and prior knowledge to the subject. One of the authors has a master degree in Computer & Systems Sciences, and has working experience as a management consultant in the area of IT transformation. When entering into this "research project" this prior knowledge will affect both our perceptions and assumptions about the topic. By addressing this issue we have made ourselves aware of the chance of subjectivity and could therefore actively work to minimize this effect. (Backman, 1998) Overall though, we believe that our prior knowledge has helped us to conduct a better study and more in-depth analysis. In addition we have been open with the fact that one of the authors currently is employed as a consultant at a major management consulting firm to avoid any discomfort from the respondents.

# 3. Theory chapter

The following theory chapter is divided in two parts. The first part describes outsourcing as a phenomena and the second part describes the IT function. We have chosen this division since we feel that our purpose deals with both these aspects, i.e. what happens with the internal IT function when using Outsourcing? Thus, we want to give the reader both the aspect of what the IT-function is, how it works and what the different components of outsourcing is based on.

## *3.1 IT Outsourcing*

To make it easy for the reader to follow we have structured this theory section to answer the three comprehensive and basic questions that an organization need to answer when outsourcing IT services; those being Why, What and How. But before going in to these in detail, a brief historical overview will be presented.

### 3.1.1 The history of IT outsourcing

IT Outsourcing as a phenomenon is not a new occurrence. Actually it entered the IS/computer industry when it was still in an early stage. For example, the company Electronic Data Systems handled the data processing services for other businesses as early as 1963 (Lacity & Hirschheim, 1994). In this early stage of outsourcing, computer service companies were mainly used to run programs within areas of financial and operational support, for example payroll and administration (McFarlan et al., 1995). The concept of IT outsourcing got its real breakthrough when Eastman Kodak in 1989 signed under to outsource its total IT operations to the three outsourcing vendors; *IBM*, *DEC* and *Businessland*. (McFarlan et al., 1995; Lacity & Hirschheim 1993:1994) Until this point, outsourcing for medium to big companies had primarily been a sideshow and most common amongst smaller companies with problematic IT departments (McFarlan et al., 1995). Never before had such a big and well-known organization, with IT as part of the strategic weapon, outsourced its IT operations. This became an outsourcing success and was the start of a tremendous interest and growth in the business. The Kodak deal sent the message that IT had matured into a commodity and therefore suitable to be managed

by an external vendor. Company executives from all industries open their eyes for the outsourcing possibility and a "bandwagon effect" could be observed, and many big organizations like Xerox, Sears, British Aerospace, Continental bank followed. (Lacity et al., 1998; Lacity & Hirschheim 1994)

Explaining the "enormous" interest in IT outsourcing could, according to Lacity & Willcocks (2000), be seen as a consequence of a shift in overall business strategy. During the 1990's many companies changed directions and abandon their diversification strategy to instead focus on their core capabilities. Many business leaders came to the conclusion that the only sustainable competitive advantage a company could have was to concentrate on what it does best. As a result of this new focus on core competence, the internal IT function became questioned as a competitive tool and was regarded as a commodity, thereby becoming a subject for outsourcing. IT outsourcing can in many cases be a strategy in itself and seen as a reactive move, part of bigger and more long-term changes of the organisation and its management (Willcocks & Lacity, 1998).

The last driver explaining the growth of the IT outsourcing market is the uncertainty of the value delivered by IT. The term "money sink" explains how many managers viewed and still view IT, experiencing problems with seeing the immediate benefits and not being able to measure e.g. increased revenue from IT investments. The desire to get rid of a troublesome IT function that is hard to asses and has problems with demonstrating its business value made the IT function and its services a hot target for cost reduction initiatives, often leading to outsourcing. (Lacity & Willcocks, 2000)

Today's IT outsourcing industry has come a long way from the start in the early 60s. Some of the main differences are:

1. The size of the companies that are outsourcing - today large companies outsource to a greater extent.
2. The industry has matured, now offering a wide range of services and in great number of alternative ways.

3. Outsourcing vendors are generally accepting to take on more of the risk and responsibility of the arrangement.
4. The relationship between the client and the vendor is increasingly seen as a partnership.
5. The complexity and technological intensity has increased, "giving more companies the option of outsourcing in a competitive provider market".

(Lacity & Willcocks, 1998)

### 3.1.2 Why should organisations outsource?

The first question an organisation which is thinking about outsourcing its IT should ask is "why". Answering this question is likely to raise other question marks; what is the aim and goal of the outsourcing arrangement, which are the benefits and risks involved, and which pro's and con's exist?

**The aim and goal with the outsourcing**

To ensure a positive end result it is important in an early stage to manifest clear goals with the outsourcing arrangement and a well-defined objective. This is necessary to give the organisation guidelines to work with during the outsourcing process. The goal and aim of the IT outsourcing arrangement should be aligned with the overall business strategic requirements to get the best results (Capgemini European CIO survey, 2006)

**Benefits**

Behind an outsourcing decision there can (as discussed in the previous chapter) be numerous incentives and factors. In general, IT outsourcing arrangements can be said to deliver one or more of the three following capabilities: infrastructure services and data centre operations, application development and maintenance, and business processes. Extensive research has been conducted on the subject of the benefits of IT outsourcing, presenting a number of potential benefits for organisations that let external vendors provide some or all of the IT related capabilities needed. (McFarlan & Nolan, 1995; Ross & Westerman, 2004) When evaluating the option to outsource different stakeholders'

perceptions and interests tend to bring a mix of financial, technical and political factors into play (Willcocks & Lacity, 1998).

In the section below some of the most important benefits are presented. These are not ranked in any particular order and the reader should keep in mind that the relative importance of the benefits will vary for each organisation and are dependent on its specific situation.

*Financial factors*

Cost reductions have for a long time, and still is, the most important driver for outsourcing. (Lacity & Hirschheim, 94; Capgemini European CIO survey, 2006) An external vendor can primarily save money to its client by its ability to leverage economics of scale but also, since frequently managing similar projects, provide the scope to manage it effectively. Substantial cost savings can especially be made by offshore IT vendors, using low cost labor found in for example India. (McFarlan et al., 1995; Ross & Westerman, 2004) Another financial aspect, motivating the use of outsourcing is increased control over the IT costs. Since IT costs are split with a rough allocation key in many organizations it is hard to get a clear overview of the cost drivers, which consequences can be excessive demand and consumption. By using an external vendor organizations can also increase the financial flexibility by replacing the fixed IT costs with a price model that allows costs to vary with usage, thus containing costs and increasing control by having a system that more directly link costs to usage. (Lacity & Hirschheim, 1994)

*Strategic factors*

Since the 1990's there has been a general trend towards specialization in most of the business world. Companies have abandoned the once so popular diversification strategy in order to focus on the business' core competences (Lacity & Hirschheim, 1994). By outsourcing IT processes that falls outside the core business vendors can free up resources in the organization to focus on more value adding activities within its core competencies (Ross & Westerman, 2004; Erber & Sayed-Ahmed, 2005).

*Technical factors*

Since outsourcing vendors, unlike their clients, have IT as their core competence they can build and leverage best practice in IT management. So by using the expertise provided by an outsourcing vendor it does not only enable the client to focus on its special core activities but also allows the firm to get access to "cutting edge" technology. By taking advantage of the experience the vendor has collected by managing several similar projects the external vendor can provide technical skills which are hard to build and manage in-house and can thereby help the organization to create important business advantages. (Lacity & Hirschheim, 1993) In some cases the main reasons for outsourcing can be to find crucial competencies that are lacking within the internal IT organization. The organization may feel that it is too expensive to build these internally, both time- and money wise (Willcocks & Lacity, 1998). Outsourcing for this specific purpose demands careful considerations when choosing the vendor. For the arrangement to be efficient it is important to realize that the external supplier not only has the sought after expertise but also a compatible company culture.

**Risks**

When an organisation is evaluating whether to outsource or not, it is important not to forget the risks associated with outsourcing arrangements. When outsourcing IT services or capabilities the company will hand over a substantial part of its control. Ross and Westerman (2004) divide the risks with outsourcing into four major types: relationships risks, transition risks, strategic risks and finally vendor/technical risks.

*Relationship risks*

Going into an outsourcing relationship with an external vendor both parties should realize that the situation for the client today could be quite different in the end of the contractual period, and not only when dealing with long term contracts. As the market changes and new technologies create new opportunities and challenges for the client, the needs can also change dramatically. Since these changes and their impact are very hard to foresee the client always takes a risk when signing a contract with a vendor that later might not

meet future needs. This risk should be taken seriously, particularly when signing long time contracts. (Ross & Westerman, 2004; Lacity et al., 1995)

*Transition risks*

All IT outsourcing arrangements includes a transition phase where the organisation, the processes and the staff need to adjust to the new situation. This phase often involves great technical challenges; e.g. linking outsourced applications together with internal applications or transferring technical staff to the vendor. Other challenges are related to dealing with organisational changes, which are likely to appear as the vendor makes changes to the old IT processes. (Ross & Westerman, 2004) It is important not to underestimated the time and money needed during the transition phase. If not calculated correctly these additional costs can easily turn the positive margin of the outsourcing deal into negative. According to the Ross and Westerman (2004) it can particularly become an issue when handling *new* technologies since the vendor are probably selling undeveloped competencies. Dealing with new technologies can hence be particularly hard for the parties involved.

*Strategic risks*

As concluded earlier, organisations in general want to outsource what they consider to be non-strategic activities (Ross & Westerman, 2004). But using this approach solely when deciding upon which part of the IT-function to outsource can lead to problems. The risk lies in simplifying the complexity of IT and the uncertainties surrounding it. Since IT often is a highly integrated part of the business it can be hard to identify so called non-strategic activities. The rapid technical advances in this area together with the complexity and unpredictability of the global market make it possible for the commodity of today turn into a strategic advantage tomorrow. (Lacity et al., 1995)

*Vendor - Client risks*

When signing an outsourcing contract the client looses some of its control over the IT function and processes, becoming dependent on the external vendor for delivering the capability needed in the way and the quality agreed upon in the contract. Therefore, the client should always be aware of the risk that the supplier goes out of business or for

other reasons not be able to deliver the agreed upon service level. (Ross & Westerman, 2004) Thus it is important to choose the vendor with care in order to minimize the risk of this occurring.

Another issue concerning the vendor selection is the occurrence of a so called bidding war over attractive outsourcing contracts between different vendors. This situation, which at first can seem positive, will in worst case result in vendors making unrealistic bid offers. Sometimes the vendor already knows or discovers by hand that they are unable to recover their business results and operational costs for the near future. This situation is called the "Winner's curse" and can lead to additional costs, poor service or considerable switching costs for the client. (Kern et al., 2002) It can particularly become an issue when handling new technologies since the vendor are selling capabilities they may not be fully developed. When dealing with new technology it is hard for both parties to weigh the potential benefits against the technical and organisational difficulties that might arise. (Ross & Westerman, 2004)

### 3.1.3 What should organisations outsource?

One question all managers need to answer when structuring the IT function of the organization is what parts should be performed internally and what should be managed by an external vendor? (Willcocks & Lacity, 1998) Since every organisation looks different and faces different challenges it is impossible to give a simple answer. IT is today a highly important and integrated part of most businesses and can therefore be said to affect and shape most processes within an organisation. This contributes to making IT outsourcing far more complex than most other forms of outsourcing. (Kern & Willcocks, 2002) In a study by Lacity and Hirschheim (1994) it was concluded that the following activities is unwise to outsource; activities that require extensive knowledge of business needs, IT planning and strategy, IT architecture and activities that are perceived as a problem.

#### The decision to outsource

When company executives are considering an IT outsourcing arrangement they usually base the decision of which parts to outsource and which to keep in-house on the belief

that some will provide strategic advantages while others can be regarded as pure commodities. As described earlier, the general rule for all outsourcing is to outsource the more commodity-like activities to one or more external suppliers in hope that they can provide the service equally or even better for less money. (Lacity et al., 1995) Supporting this approach is the idea that companies are in need of *information* rather than *information systems* and that cost savings are driven by economics of scale. (Lacity & Hirschheim, 1993) As mentioned earlier there also exists critique against this approach since it tends to over-simplify the complexity around the outsourcing decision, which easily can lead to disappointment (Lacity et al., 1995).

In an article published by Jane Linder (2004) a change in attitude was reported when looking at areas to be considered for outsourcing. Instead of outsourcing IT processes regarded as non core, the author beieve that outsourcing is increasingly becoming a mean to address more fundamental needs, for example addition of new capabilities and facilitate strategic and structural changes. This emerging outsourcing practise is called transformational outsourcing. (Ibid)

### 3.1.4 How should organizations outsource?

After answering the questions why and what, the organisation must find a way to realise their goals and anticipation with the IT outsourcing. Outsourcing of IT can vary a great deal, both in form and degree of outsourcing. As the industry has grown so have the different options available. Today there are numerous of different outsourcing models to choose from, designed to suit a ray of different organisations and all with various benefits and risks. In this section we will start of by explaining different IT outsourcing alternatives based on two criteria; the amount of an organisation’s IT function that is outsourced and under what forms.

The degree of outsourcing is a quantitative measure of categorizing different outsourcing options. Lacity et al (1997) present an outsourcing model where the different types are separated in terms of their shares of the total IT resources.

- Total outsourcing: Meaning that at least 80 % of the IT budget is outsourced.
- Total in-sourcing: At least 80% of IT budget is kept in-house after outsourcing alternatives has been evaluated.
- Selective outsourcing: A mix of outsourced and in-sourced functions, neither reaching 80 % of IT total budget.
- De facto in-sourcing: The internal IT department is used without any evaluation of external alternatives.

In general, large scaled outsourcing deals (total outsourcing) is often a part of a bigger and more lasting change involving the way in which the organization need to be structured, focused and managed. (Willcocks & Lacity, 1998) Applying total outsourcing while using one or a few vendors can put the client at risk since it tends to increase costs and decrease flexibility over time. An alternative to total outsourcing is to use selective outsourcing. This approach assigns specific functions or services to the different vendor's best suited for the job. According to Lacity et al. (1997) selective outsourcing can be a successful form of outsourcing since it incorporates the fact that the information technology span includes a variety of activities different in terms of business contribution, integration with existing processes and level of technical maturity. Typically there is no one supplier or internal IT department that possesses the experience and economies of scale to perform all IT activities effectively. By using selective outsourcing the organisation should be able to increase its flexibility and control and also minimize risks by spreading it onto different vendors and time horizons. This approach also takes into consideration that IT activities, depending on their characteristics, require different amount of management attention, security and consideration to be successful IT outsourcing objects (Lacity & Willcocks, 2000). The authors also stress that selective sourcing works most effectively within the context of business strategic concerns and an overall IT-sourcing strategy that retains both flexibility and control.

Other benefits of using selective outsourcing are for example motivated in-house personnel competing with external suppliers, reduced risk since it is spread over a number of vendors and a learning process that can be incorporated more swiftly. Possible

downsides with selective outsourcing are increased costs while managing multiple contracts and vendors, problems with the integration and cooperation among the different vendors and finally a risk of loosing site of the overall strategic issues while focusing on maximizing the operational possibilities. (Lacity & Willcocks, 2000)

## *3.2 The IT function*

To describe what an IT function consist of, how it operates/delivers services and what capabilities that are needed to deliver these services, we have chosen to divide this section into the following sections:

1. *IT function purpose and mission* – What the IT function's purpose and mission is
2. *IT organization* – Ways of organizing the IT function to support purpose and mission
3. *IT governance* – How to secure that purpose and mission is met trough steering and controlling
4. *IT capabilities* – Roles and competences needed to deliver services that fulfill overall purpose and mission
5. *IT stakeholders* – Demands from the IT function's environment

### *3.2.1 IT function purpose and mission*

Today, business managers, IT managers and research institutions agree that the IT function should align the IT strategy to the company's overall strategy (e.g. Earl, 1989; Kommi, 2006; Gartner, 2006). Companies with IT delivery models that are aligned with strategic business requirements have also been shown to have higher operating margins in general (Capgemini European CIO survey (2006). For some time now IT has been an integrated part of most businesses, thus affecting the core processes in which the company executes its strategy. Therefore business processes and systems must be aligned in order to operate effectively, create value and keep cost down. In many organizations information technology integrates product design, material purchase, manufacturing processes, sales and customer service (Lacity et al., 1997). In other words, IT interacts with most parts of a company's operations, supplying them with infrastructure as well as data for decision making. Hence IT is very hard to isolate which is important when you want to measure the value provided or assess the criticality of different IT processes, e.g. when it comes to evaluating an outsourcing deal.

Business changes in the environment implies a need for process reengineering in order to meet demands for customer satisfaction, decreased cycle times and decreased costs. Technology changes such as new development methods, evolving technology and availability of outside suppliers vastly increase the options in a company for computing and communication. (Rockart et al., 1996) For the IT function, these factors imply higher degree of complexity in managing IT. If you add the dimension of macroeconomic changes such as changing sourcing and Offshoring possibilities the picture gets even more complex. The IT function has to adapt to these changes as the whole organization evolves. Another view is that development within IT actually can enable new and superior business strategies (Willcocks et al., 1997). A changing environment creates opportunities for a firm to excel in their IT business relative to its competitors. Most large organizations are now alert to using IT for achieving competitive edge, particularly in the form of building new services to customers and distributors. (Feeny & Ives, 1997)

From a company perspective, IT must support the business strategy whether IT services are provided in-house or by a vendor. But on a functional level, the IT functions' objective to support business strategy will include other perspectives when some of the IT services are supplied from outside/external. IT outsourcing strategy is defined by Lee et al. (2004) as the logic visible in a firm's portfolio of IT outsourcing decisions. Strategy is not considered to necessarily be a single decision that is consciously made, but rather the manifestation of multiple decisions (ibid). The objective must in this case include the handling of external IT delivery. Instead of focusing on e.g. maintaining systems, the IT function must now focus on developing the relation to the outsourcing partner so that they can provide maintenance in a good way.

### 3.2.2 The IT Organization

The set-up of an IT organization has a lot to do with the question of centralization versus decentralization (Earl et al., 1996). There is no right or wrong answer whether an IT function should adapt one of these two extremes. The decision should rather be based on the strategic intent of the IT environment, geographical spread (McFarlan et al., 1983) and the specific characteristics of the corporate culture (Forrester, 2005:b). Basically, the

IT organization should be more centralized if the organization strives for synergies, economies of scale, common standards, cost control, critical mass of competence etc. On the other hand a decentralized IT function has advantages in closeness to the customer, responsiveness, business understanding and that the users can control the IT priority. (Forrester, 2005:b ; Earl, 1989) In practice, combinations of the two models are common for many reasons. The idea of "federated IT functions" seeks to combine the two extremes by decentralizing some decisions and keeping some at a central level. This set-up is usually characterized by differences in reporting structures. For example infrastructure issues are often reported directly to the CIO while question of local applications is handled at a lower level, reported to the CIO via application groups or councils. Although a federated structure will not solve all issues it does provide the potential for greater efficiency and integration while not losing responsiveness (Forrester, 2005:b). Getting the right distribution of managerial responsibilities is an imperative for the IT organization (Rockart et al., 1996). In many organizations there will be a federal governance model where some decisions will be taken centrally but also allow autonomy at the local level. Getting this structure in place requires a clear IT vision and a group-wide strategy and architecture to enable the benefits of both centralization and decentralization. Although, moving from one of these two extremes towards a federated model is a tough challenge but once it is in place it could easily be modified. (Ibid)

**Technology's impact on organization**

The arguments for the different set-ups appear to be no different from the normal tensions between centralization and decentralization, i.e. exploit synergies and lower cost when centralizing and increasing flexibility when decentralizing. However, since it involves information and technology it raises some other aspects. (Earl et al., 1996) *Information* as such is a subject for power in an organization, which means that the control of information could be an issue that affects the organizational design. Secondly, *technology* raises questions concerning risk, change, scale and infrastructure which could also influence the choice of organizational set-up, e.g. whether to outsource some parts or not. (Ibid)

**Outsourcing effects on centralization vs. decentralization**

Within companies that have outsourced parts of their IT function several decisions are pushed outside the company. Hence you could view this as a decentralized model. At the same time, many of the decisions in this situation will be taken on a central level. Earl et al. (1996) state that outsourcing of operations and development may lead to downsizing of the IT function but it does not necessarily alter the centralization versus decentralization axis. Thus, the internal IT function has the option and also the responsibility to define where the decisions are to be taken, centrally or decentralized.

**Small vs. large IT functions**

The very size of the IT function will also affect how it is set up and operates. Taking two extremes, in large IT functions (e.g. more than 800 employees) it is possible to have dedicated resources to strategic functions, e.g. strategic planning, company architecture, technology research and vendor management. In small IT functions (e.g. less than 60 employees) these roles will typically be shared or even not required and the IT function will focus more on day-to-day activities. In the first situation there is risk that the IT function will be forced into complex structures and also become more bureaucratic and isolated from their clients. Realizing expected synergies can then be tough. Although, having dedicated resources means that the IT function can apply more sophisticated management techniques and also influence the company's management team to a great extent. In the latter example the advantage is that small IT functions could change direction and respond to customers needs much easier. The disadvantage is that the IT manager will have to manage more and lead less since managers below the CIO is less mature than within larger IT functions. (Forrester, 2005: b)

### 3.2.3 IT Governance

The term "governance" is widely used, but sometimes with a various meanings. The IT Governance Institute[1] defines governance as:

[1] www.itgi.org

*"The set of responsibilities and practices exercised by senior management of the enterprise designed to establish and communicate strategic direction, ensure realization of goals and objectives, mitigate risk, and verify that assigned resources are used in an effective and efficient manner."*

Based on this definition Rau (2004) explains that IT governance refers to the way senior management interacts and communicates with IT leaders to ensure that technology investments enable the achievement of business strategy in an effective and efficient manner. So the components of a governance model constitute of the different roles involved in the IT business and the relationship between these roles. On top of this, a governance model applies a set of measures in order to control and follow up these relations.

Implementing effective IT governance requires a framework based on three major elements (Forrester, 2005:a):

1. *Structure* – Who makes the decisions?
2. *Process* – How are IT investment decisions made?
3. *Communication* – How will the results of these processes and decision be monitored, measured and communicated?

The first question is connected to the organizational IT set-up, whether it is centralized, decentralized or federated. In centralized functions, the decision making and the IT-budget are at one place. In the other situations they are often fragmented. In this way the governance model and the organization set-up is linked to each other. (Forrester, 2005:a).

The second question deals with *how* decisions are made, what roles that are involved in different stages and which forums that are used to take decisions. To support this process companies could adapt certain tools, such as Portfolio Management, i.e. managing your IT investments and projects as an investment portfolio, and Service Level Agreements (SLA) which defines the service level provided, quality level and related costs to the users. (Forrester, 2005:a).

The third question is related to the way the results are conveyed to the organization. This could be done in different ways. To use a known example, the Balance Scorecard approach (Kaplan & Norton, 1996) adapted to the IT function is one way of measuring the operation and to communicate the results in different perspectives. The actual measuring of the value of IT has been a challenge for most companies and has been widely discussed in research literature (Willcocks et al., 1997). Since the results of IT investments seldom has a clear and isolated effect on the income statement, the value has to be measured in other ways, e.g. as increase in time-to-market for products enabled by improved IT systems.

Further, Feeny et al. (1995) particularly stresses the importance of efficient processes to manage IT. These processes will determine how effectively the IT service is controlled and how fast it can adapt and pursue a different solution than the existing one. The authors claim that by developing such processes will not only lead to superior IT but also a greater ability to identify and utilize changes in the markets.

### 3.2.4 IT capabilities

Willcocks et al. (1997) suggests that to determine what the core of IT is you should answer the question; "which IT capabilities are core to the business's future capacity to exploit IT successfully". Following this line of thought, the authors divide the core of IT capability into four different categories;

- *Understanding of IT capability*
- *Business and IT vision*
- *Delivery of IT services*
- *Design of IT architecture*

The challenge of understanding IT capability is not just about keeping track of different technologies. Their usage is defined by the consumer rather than the producers. Therefore it has more to do with understanding the functional characteristics of the applications and how they are being deployed. The second category, business and IT vision, concerns the

alignment of business and IT strategy where the systems should meet the business demands, and, as we have discussed earlier, IT may enable new and superior business strategies. The third capability mentioned was the challenge of delivering IT services, with low-cost and high quality. This area is transforming as the market for external providers of competence has grown vastly during past decades. The effect of this change is that sourcing skills have become more important for the IT managers. The last capability needed has to do with designing the IT architecture. The capability required in this case is twofold, partly a deep technical knowledge concerning systems, standards and technical trends, but also an understanding of the business and its needs. (Willcocks et al., 1997)

**Capabilities crucial when using outsourcing**

In the view of Feeny et al. (1995), companies, after decided upon what parts of their services they should outsource will need to appoint a team to function as contract administrators and system/service integrators. The main tasks for the members of this group should be to; ensure that vendors provide the agreed upon services, that the user's (reasonable) needs are being satisfied, address disputes over contractual issues and asses penalties. This team should also decide when the service level is too low but also when it’s too high. For example do many users not take advantage of the agreed upon training or companies insist on extraordinary service levels, which can become extremely costly. To have a successful contract-management team require people with extensive knowledge of the vendors, the users and different contracts. Therefore these teams call for a mix of competencies; contract management skills, technical skills of what is required from the IT-service, a systems integrator for the externally provided systems and those already in-house. Feeny et al. (1995) believes that these three different roles should be found in-house for the best result to be achieved.

Companies who outsource but who lack these competencies are likely to run into system gaps which makes the information sharing in the organization difficult. This can in turn lead to a negative attitude toward the outsourcing situation (and the vendor), which often leads to building on own solutions in parallel, creating a mess of ad hoc systems. The

result can be increased costs which is often the opposite of the aim with the initiative. (Ibid)

#### 3.2.4.2 Business capabilities

According to Rockart et al. (1996) IT leaders often find that their staff is lacking in business knowledge and skills. If the necessary relation between the business and IT are to be built, the IT personnel's competence will need to change. Funding of internal education programs and creating partnerships with outside companies are example of initiatives to meet this demand. Outsourcing some IT responsibilities to computing services firms can compensate for skill shortages. However, making outsourcing work is a different proposition than deciding to outsource. The IT managers must be informed buyers, good negotiators and as skilled as the vendor in each area.

### 3.2.5 IT function key stakeholders

IT involves many stakeholders, which all have different kind of demands depending on the company's' specific situation. If the management is to ensure that the exploitation of IT meets its needs, the stakeholders must be managed. (Earl, 1989; Rau, 2004)

Increasingly as IT is used as a strategic weapon, businesses are linked up with their suppliers by networking. A supplier could in this case also be interpreted as a service provider or a "vendor", executing parts of the organizations value chain and processes. The demands on the IT function have increased a lot during past decades and systems delivery now also includes procurement and integration (Rockart et al., 1996). Firms are increasingly recognizing that they do not have the time, money and expertise to develop large integrated systems. They are instead purchasing software and sub-contracting development to third parties who have access to the latest tools and techniques. (Ibid) Other important stakeholders are business and management, which have to have good communication with the IT people in order to ensure that both business and technology perspectives are involved in understanding business opportunities. Employees are another stakeholder as they are the users of the technology and they need to be involved when designing systems and changing work routines. (Earl, 1989)

### *3.3 Theoretical summary*

In the prior theory section we have aimed at providing two different aspects of our field of research. Concerning the theories around outsourcing you can conclude that it is and has been an evolving topic, influenced not only by heavy research and studies, but also by large macro economic factors and trends. In sum, the theories underline the many reasons for outsourcing and the many risks connected to such initiatives. In every given business situation the rational manager will try to reduce the risk as much as possible while maintaining the benefits. Based on the theory, this is also an approach that could be valid when deciding on the scale and number of vendors to use. Using many different vendors will imply more access to expertise and specialist, and using one or a few vendors will imply higher volume and hence larger scale effects that both parties benefit from. Thus there is a balance between cost and competence in this aspect which needs to be assessed against the risk undertaken. The section also brings up the questions of *what* to actually outsource. Since IT today is an integrated part of most businesses there is a challenge in choosing the right processes to outsource so that the rest of the business avoids negative impact. The challenge lies in defining and isolating the processes, and in many times the people, which can be “moved” to an outside vendor.

The IT function’s mission is to execute the IT strategy in such a way that the overall business strategy is supported. In this sense, the usage of outsourcing should be an act in line with the IT and business strategy. The high level effect of outsourcing on the IT function is that some parts of the supply chain is taken over by an outside player, who then delivers services/value to the company’s chain of value adding activities. The organizations structure, its principles of governance, capabilities and stakeholders are dimensions of the IT function which could be affected when using outsourcing. Coming back to the alignment of IT strategy and business strategy, the IT manager (or CIO) needs to secure that these dimensions will continue to support the overall target in situations when outsourcing is introduced and implemented in the operating model.

# 4. Empirical Findings

In this section we will present our findings from the interviews. Since our purpose deals with the changing role of the IT function we have chosen to present the findings along the structure of the IT function described in the theory chapter, i.e. IT function purpose and mission, IT organization, IT governance, IT capabilities and IT stakeholders.

In order to maintain the respondents' anonymity we have relabeled the companies. To minimize any disturbance for the reader we have named them after what business they are operating within. To further enhance the reader's understanding we will below present a short description of each company.

| **Respondent** | **International business (IB) or National business (NB)** | **Numbers of employees in the company** | **Number of employees in the IT function** | **Number of vendors used** |
|---|---|---|---|---|
| Company Appliances | IB | 15 000 + | ~ 1000 people | ~ 10 |
| Company Medical Technology | IB | 5 000 - 15 000 | ~ 180 people | ~ 4 |
| Company Travel | IB | 0-500 | ~ 4-5 people | >10 |
| Company Telecom | IB | 15 000 + | ~ 2000 people | 2 major, many small |
| Company Bank | IB | 5 000 - 15 000 | ~ 900 people | ~2-3 |
| Company Liquor | IB | 15 000 + | ~ 100 people | 3 |
| Company Production | IB | 5 000 - 15 000 | ~ 30 people | > 10 |
| Company Construction | IB | 500 – 5 000 | ~ 20 people | 4 |
| Company Candy | IB | 500 – 5000 | ~ 30 people | 1 major, a couple small |

*Table 1: Business scope, number of employees (total and within IT function) and number of vendors used, per interviewed company*

Concerning the number of vendors that is used we can see two major trends, one is to use a couple big vendors and the other is more a multi-sourcing approach where three companies state to have 10 or more vendors. The companies also differ when it comes to size in terms of employees. All companies were also present on the international market with offices and staff outside Sweden.

| **Respondent** | **Purpose of outsourcing** | **Services/capabilities outsourced** |
|---|---|---|
| Company Appliances | Synergies & cost - Part of overall company strategy to lower cost | Help desk support, computers. Operative functions like security. Infrastructure |
| Company Medical Technology | Maintain flexibility while growing | Datacenters, maintenance, roll-outs, email, first line help desk |
| Company Travel | For expertise and resources | Maintenance, operation |
| Company Telecom | Lower cost | Development, operation, maintenance |
| Company Bank | Lower cost | Help desk, computers, safety |
| Company Liquor | Mainly lower cost – Part of overall company strategy to centralize | Development, operation, infrastructure |
| Company Production | For flexibility, turning fixed costs into variable and using expertise | Development, much of operation and maintenance, support |
| Company Construction | Lower costs, but also a step in focusing on core operation | Infrastructure, Help desk, Daily operations |
| Company Candy | Lower cost | All, expect internal help desk and development (development was outsourced before) |

*Table 2: Reasons for outsourcing and services outsourced, per interviewed company*

There were many different reasons stated for using outsourcing but a trend can be seen in that bigger companies tend to stress cost reduction while smaller companies have a need for more flexible resources. All interviewed companies state that they use external vendors for everyday IT operations and/or maintenance. Three of the companies also

used vendors for development while for example Company construction is very clear on keeping development capabilities in-house since it was considered a strategic business advantage. The initiative to outsource part of the IT services was mainly brought up by the CIO or the IT-manager, and more than half of the interviewed companies state that the actual decision was taken in collaboration with the company management team.

## *4.1 Empirical summary of each company*

In the following section we aim to give the reader a description of the background characteristics of each company that we interviewed. By providing the empirical data in this dimension (per company) we hope to facilitate the reader's comprehension of the empirical material and also increase the understanding of our analysis and conclusions.

**Company Appliances**

- The aim with the outsourcing was to facilitate and support the company to reduce the overall costs by streamlining the IT processes and the way the IT services were delivered. Based on this objective they stress the importance of control over the processes that is going to be outsourced.
- The company approaches the IT outsourcing arrangement by using a normal project approach with which they are used to and have applied earlier when conducting change programs.
- Underlines the need for change management very much.

**Company Medical**

- Flexibility is the outsourcing rationale since the company act on an international market that frequently changes. Outsourcing is hence used to make the IT organization more equipped for following the business volume as it changes over time.
- This highly variable environment makes them used to manage change. They believe that during an outsourcing deal one can often benefit from switching managers between different key roles. The primary goal is to facilitate the

implementation process since it is thought that it is easier for new managers to take immediate actions.

**Company Travel**

- Used outsourcing to gain access to expertise and resources needed for supporting growth. This strategy was used since the IT operation was small and not viewed as being a part of the core processes within the company. Identifying need for IT was defined completely as a process belonging to the business, which kept the IT department quite small in size and also in responsibility.
- Flexibility and competence was attained by using multiple suppliers and selective outsourcing, which could provide them with expertise in different areas.

**Company Telecom**

- Used outsourcing simply for cutting IT cost, which was a demand from the company management group. They approached the transition as a big bang change, which included cutting a lot of staff and creating new functions at one time. This also brought along some problems in terms of loss of competence.
- Outsourcing IT affected their strategic governance process in two ways; forcing them to think in more long term strategic plans, and also freeing up more time to devote to strategic questions.
- The company thinks that they have lost some flexibility and ability to steer when using an external vendor, which could be related to their approach and vast scope of outsourcing.

**Company Bank**

- Had only conducted minor outsourcing deals but was constantly evaluating the option. A more encompassing outsourcing transition would imply a lot of risks since IT was seen as the fundament of their operation.
- There were no substantial changes in the organizational set-up in terms of departments and forum structure. The current outsourcing was relatively small compared to the in-house IT operation.

- Stressed the importance of an exit strategy when entering an outsourcing arrangement. The processes need to be defined and standardized in order to be flexible enough if the arrangement does not work out as planned.

**Company Liquor**

- The outsourcing decision resulted in an increased centralization with a much more slimmed organization. Today they find it very hard to affect innovation on a local level since most of the IT decisions nowadays taken on a global level.
- Underlined the importance of the internal management competencies and management roles. In the new situation management personnel had to be strong and competent in order to secure that the staff could adapt to the new situation and also develop the business in new ways.

**Company Production**

- Purpose of outsourcing was to lower cost over time by increasing the variable part of the cost base. The CIO of this company made it a rule to only put people from the business side as project leaders in development initiatives done by the vendor since they had the best understanding of how the initiative was aligned to the overall strategy.
- Has chosen not to use KPI's in the agreement for development activities. This was believed to possibly do more harm than good since it creates the wrong focus at the vendor side. Trust was hence a way of managing the relation.

**Company Construction**

- Since this company were used to dealing with vendors in the day-to-day work, they applied this model to IT in order to reduce costs. Based on experience they knew how to use their size as an important tool to put pressure on the outsourcing vendors, making them not only fulfil the paragraphs in the contract but also go beyond it.

- The outsourcing arrangement lead to some changes in the set up of roles and functions in the IT department, creating more specialised roles and with a greater management focus.

**Company Candy**

- The expectations of cost efficiency given by the vendor was not realised as planned. They have experienced some real disappointments since they started outsourcing and later in-sourced some of the services in order to reduce cost.
- The company believed that the lack of new roles, such as vendor management and follow up, and training was one of the reasons why it initially "failed completely".

## *4.2 IT function purpose and mission*

### 4.2.1 Alignment of IT strategy with business strategy

*"Today all strategic decisions are taken in-house and are then communicated to the suppliers. We did try to gather all the vendors once for a strategic meeting to explain what we wanted on a more general level, this did not work out very well."* Company Travel

The organizations that we interviewed had different reasons to why they had chosen to outsource parts of their IT services (see table 2). In most cases the outsourcing was explicitly stated to have a very close link to the overall business strategy. Three of the companies had a strict cost reduction agenda and in these cases the outsourcing was executed in order to reduce the overall cost level and decrease the level of fixed costs. Company Medical works in a highly changing environment and represents another outsourcing purpose. They used outsourcing to be more flexible, having the possibility to end contracts in one part of the world and move the operation to another part. They stated clearly that outsourcing supported them in having a business strategy based on flexibility. A third company (Company Appliances) was working a lot with their internal processes, driving efficiency gains out of business process re-engineering. In this case outsourcing

was aimed at facilitating and supporting the company to streamline their IT processes and the way the IT services were delivered. A fourth and different example was Company Travel that was quite small measured as number of employees. The CIO of that company explained that outsourcing was the best solution for them since it would cost a fortune to hire all the required expertise on full time and the management team did not want to build up a huge staff of support function resources.

### 4.2.2 Innovation

*"The IT organization can be one of the best places to drive innovation, cross region and cross country processes, since they have a better understanding for the end to end business processes..."* Company Appliances

Concerning the outsourcing effect on innovation within the internal IT function, we found that companies had different views and experiences. We can divide the respondents' answers in two groups where the largest group, who thought IT does not drive innovation, claimed nothing had changed after conducting the outsourcing deal. The other smaller group thought that it had changed, but to the worse. Interestingly they claimed that due to the required formalization of processes, demands for business cases, approval gates and the fact that the delivery of IT services was put outside the company made it harder to innovate with the help of IT. This group, in contrary to the first group, thought that the IT function was a driving part of innovation.

On the negative side, doing small changes without going through the whole decision process was seen as very hard. Employees from the business parts of the company could then view the IT function as a bottle neck for such small improvements that earlier hade been executed without any central approval. Further, the contract needs to be flexible enough and the vendor has to have a good insight into the business. This was seen to be very hard to achieve. Thus, within this group of companies the ability to innovate was decreased while using outsourcing. Company Construction said that innovation had become more important during past years, something they did not think of when

outsourcing. The respondent's belief was that innovation had been facilitated by keeping the resources internally.

### *4.3 IT Organization*

What we discovered was that for most of our respondents outsourcing have not had any significant changes in their organizational set-up, despite a couple of cases where a whole department was closed and moved to the vendor side. The respondents tended not to think in terms of organizational structure when it came to adapting the internal IT function the new situation. Instead, roles, forums and methods of collaboration where brought up. It was rather stated that keeping the structure was a good way to handle the new situation since; (1) it is already in place and it is working, and (2) changing the structure would increase the risk of complicating the environment for the employees. Although, in the case of Company Telecom the respondent mentioned that the company had established a new department called vendor management, which could be viewed as a significant structural change. The purpose was to have a central function that focused on the vendor relation, which was a big deal for this company when over 2000 employees were transferred at one time. So in this situation when the company chose to outsource a big part of their IT services, the massive change in ways of working called for a coordinating department in order to control the new situation and secure the delivery of IT.

Another finding that we made was that the majority of the interviewed companies had not outsourced all the services at a single point in time. Instead the use of vendor partners started with only a few areas and then grew to encompass a significant part of the IT services. The reason for this metamorphoses like process was mainly related to companies wanted to; (1) minimize the transition risk, i.e. not changing the processes and stirring up the employee environment so much that they would risk the delivery of IT services to the organization, or (2) as the business expanded, the increased need for IT services was put on vendors while maintaining a stable core of IT staff internally.

### 4.3.1 Centralization versus decentralization

*"Where the decisions are taken has not changed to any significance, there are still the same strategic and tactical levels."* Company Medical

Regarding the balance between centralization and decentralization among the interviewed companies we have not been able to see that the use of outsourcing affects the balance between centralization and decentralization. Rather, seven out of nine companies did not think it had any impact at all. What we did find was that Company Telecom and Company Liquor had created central functions for vendor management and sourcing, which led to those decisions was taken by a central department. But since the companies had not been exposed to these type decisions before, you can argue if it was to be defined as "change" or not. Further respondents from organizations with a relatively small IT operation tended to answer that the "location" of decision-making did not change at all. Instead, these companies had employees that shared roles or had more than one role which implied an obstacle for outsourcing these competencies.

## *4.4 IT governance*

*"The outsourcing deal put pressure on us to think in longer terms. We need to have an idea of how to operate this business 3-5 years forward in time when we sign contracts."* Company Telecom

All of the respondents suggested that using outsourcing affects them more or less on *how* decisions are made. Most companies (7 out of 9) did however not agree that outsourcing affects the IT governance on a strategic level. Their view was that outsourcing is only a choice of how to deliver IT services to the business side, i.e. from internal delivery to external. Although, Company Telecom did explicitly underline that outsourcing affects the strategic governance process in two ways; by claiming that they now have a higher pressure on themselves to think more in long term strategic plans, and also that while using outsourcing they free up more time to devote to strategic questions since the vendor is doing a lot of the operational job for them. Further, the same respondent pointed out that having a long term perspective is crucial for the internal IT organization and for the

business to understand what the vision and ambition for the IT function is. What differentiated Company Telecom against the others who did not respond in a similar way was primarily that they had conducted the outsourcing deal at one time and the result was a decrease in staff with around 50%. The highlighting of the long term perspective and the importance of communication to the employees was more likely needed in this situation than in the other companies since the form and approach to outsourcing was very different.

### 4.4.1 Formalization and standardization of processes

*"If you fix the processes and routines before you outsource it will be much easier to get a better deal when going out with the "tender round". If doing so, it might also show that it is cheaper to keep it in-house."* Company Construction

Although we could not see any clear correlation between outsourcing and changes in centralized vs. decentralized decision making we clearly discovered that outsourcing affects the operational and decision making processes. The interviewees gave two perspectives on this matter. First of all, the interviewees experienced a significant formalization of the way the internal IT work was carried out. The biggest reason for this was that companies did not want to, or could not outsource the work if it was not standardized. Doing this would mean loosing control of the business. So in other words, standardizing the processes was seen as a prerequisite for using outsourcing. As one respondent put it:

"*Outsourcing is all about doing things right from the beginning. Otherwise it will just end up in your lap"* Company Appliances

All the respondents more or less actually claimed that you should not outsource your business if you do not have control over it. The reasons stated for this were several;

(1) To outsource problem areas will not solve the problem, only make it more complex to handle.

(2) If lacking control, the vendor will automatically have more knowledge of your operation and could therefore use it in their advantage when it comes to pricing.
(3) Lack of control means that it will be hard to design the agreement in the right way with key performance indexes (KPI) set at the right level. If the business is running poorly today, the company will not be able to asses what the right service level should be and what price that would be appropriate for this service level. So the operational processes need to be set and defined for the company to fully understand what you are outsourcing and what you can expect from the vendor.
(4) It will facilitate going out and asking for bids if you know your own business. Further, once you standardize it will also be easier to conduct and benchmark the business case, i.e. if it will be cheaper to outsource or not.

Also, once the company had entered the outsourcing contract and the vendor was running the business, the process of changing the way of working or expanding the services delivered by the vendor was now formalized. A few examples that were given were that the interaction with the vendor often took place through different forums where people from both sides were represented. To bring some issue into this forum often demanded some sort of formal written change requests and preparation of business case calculations. Further, in order to get approval of change requests responsible managers were needed to be contacted. This was a clear difference compared to before when they had the services delivered from the inside, and it was only a matter of going to the right person to get the work initiated.

In sum, the effect of this formalization was seen as both positive and negative. The positive thing was that going through all these steps would secure that everything was prepared and analyzed in more detail than before. Nothing would be changed unless it had gone through all the gates of approval. The negative aspects concerned the loss of flexibility in terms of longer lead times and also, as some remarked, that the internal organization might feel that they loose some empowerment.

*"We have lost some flexibility and ability to steer now that we are using a vendor to do the job for us."* Company Telecom

Worth mentioning is the respondent at Company Construction who added that formalization of the processes and standardization of the work was something that they worked with continuously. The outsourcing was in this case conducted with the objective of standardizing the processes so that they could steer the delivery of IT services more easily. Another comment made from Company Bank was that going into a larger outsourcing deal you have to have a good idea of how to exit the agreement if it does not work out as planned. In the situation of in-sourcing or changing vendor you have to have processes defined and standardized in order to be flexible enough.

## *4.5 IT Capabilities*

### 4.5.1 Competencies & roles

*"Before we had more "low-qualified" jobs like PC-technicians. These jobs have disappeared. In today's organization we have more developers, which we see as a great competitive advantage but also as the most cost efficient solution since our needs are very specific."* Company Construction

The companies interviewed had outsourced different type of tasks (see table 2). As we have seen earlier, the choice of what parts to outsource was in most cases described as an interpretation of the overall IT strategy. Respondents stated though that a crucial success factor was to maintain some of the expertise internally in order to have the knowledge of what to source. A few respondents also stressed the importance of having the "right type" of people on key roles. The CIO of Company Production had as a philosophy to only put people from the business side as project leaders in development initiatives that was done with the vendor. The reason was that the vendor is good at producing systems and applications, but they lack the knowledge about the business. This was balanced with a person from the company who had a background in the operation. Another interesting point given Company Medical was that during the process of outsourcing you should not

necessarily keep the same managers in the same position. Rather, swapping managers between different key roles could facilitate the process of outsourcing:

"*You have to get the right person to handle the relation. Example: if you outsource the help desk and make the help desk manager responsible for the relation, he/she will probably focus too much on how the vendor do the job and interfere all the time."* Company Medical

When it came to roles and competencies in general all the respondents said that the outsourcing deal put more focus on what their critical roles needed were. One type of competence that was mentioned by all respondents and that was competence of buying/ordering services. This was stated as the most critical competence to keep in-house when outsourcings since the company had to "buy" many of the services from the vendor. Company Telecom was the only organization that had created new roles after outsourcing. The new roles was Vendor management, having the holistic view and control of the vendors deliveries, and also a Performance management role which basically was responsible for monitoring the vendors performance and work proactive to improve the efficiency in the relation. A thinkable reason to why Company Telecom was the only organization that had appointed new roles could be that it is significantly bigger when it comes to IT resources compared to the other companies and also that they was buying a lot of their services (development, operation and maintenance) from the vendor. Company Liquor underlined the importance of management roles and competences. In the new situation, with new or changed processes, the managers needed to be strong leaders in order to secure that the staff could adapt to the new way of working.

*"I think our lack of new roles, such as vendor management and follow up, was one of the reasons why it (the outsourcing) initially failed completely"* Company Candy

A challenge more or less every respondent touched on was to achieve a proper balance between the company's competence and the vendor's competence. At Company Telecom a huge outsourcing was done where a lot of people were taken over by the vendor. After

the breakup the company realized that they had lost too much of their competence and that the vendor had become too "strong" in the relation. The action then taken was to get some of the key people back into the organization in order to reinstall the balance.

### 4.5.2 Training

*"You keep the people that are good on the strategic level, considering both IT and business issues. The best training is in-house, you learn over time – managing vendors can't be learned at a course."* Company Appliances

During the interviews the respondents was asked whether the employees within the internal IT function had had any form of training during the outsourcing period or afterwards. The answers show that only in a few cases (3 of 9) training in the new situation and the new roles was given to the employees. The impact was however described as very good. The personnel was trained in e.g. contract writing, negotiation and educated in the new routines. Within this group of three, there was no difference in the degree of outsourcing or the reason for outsourcing. What was interesting though was that the size of the IT organizations was quite small in these companies. The purpose of the education could have been to broaden the knowledge and teach new skills that the small operation did not have before, compared to larger IT functions.

## *4.6 IT function key stakeholders*

### 4.6.1 Vendor relation

*"Trust is extremely important. Sometimes it's ok to go outside the SLA-agreement if you have a good relationship with the vendor. Personal contacts are important; you know that you can call them on a Sunday if there is a problem"* Company Travel

The biggest difference in the IT function was reported to be the impact of *trust* in the new relation(s). When having the resources within the internal IT function the delivery of IT services was handled by ordinary management, basically through evaluations and follow ups. What the companies experienced after the outsourcing was that the distance to the people made it very hard to control and steer the delivery of IT services to the business.

All of the respondents stated that building the relation on trust was as important as the contract and the service level agreements itself. When asked to describe what "trust" implied a common description was that contracts and SLA's were only something to lean against. For many, trust implied that issues could be solved on a person to person level, not going down to what the SLA actually stated. A few respondents had experienced situations where the contract was diffuse in a certain area. In these cases trust meant that they could solve the problem in a smooth way. Trust was also expressed in terms of being proactive. In healthy "client – vendor" relations the vendor would challenge their client and continuously look for ways of improving the collaboration. Company Medical explained that one of the vendors they used would come up with ideas of improvement that many times did not benefit the vendor as much as the client. Company Candy was although very disappointed at the vendor since they did not meet the expectations of being proactive enough in developing the relation. Almost all companies (7 out of 9) stated that they had changed vendor since they started to use external vendors. The reasons for doing this were in most cases related to unforeseen high costs and/or insufficient quality.

### 4.6.2 Securing quality and value

*"The evaluation of our vendors is an ongoing process that never ends"* Company Appliances

The question of how to secure that the value delivered to the company stay at the same level or improves while utilizing outsourcing is fundamental according to the respondents. In center of this discussion is the concept of KPI's and contracts. All companies except Company Production had used SLA's and KPI's in the contracts. But Company Production did not use KPI's for development activities. The reason was that the CIO believed the measures to do more harm than good. If KPI's exist, this will be the only focus from the one delivering services. The problem described was also to know what KPI's to use when setting up the agreement, i.e. before the outsourcing is conducted. Choosing the wrong measures could have a significant impact on the business and also on the price paid, several respondents noted. Further, having regular meetings

with the vendor was also stated as a way to secure the value delivered. By actually meeting people from the vendor side you build a relation and thereby trust. Another important factor mentioned regarding securing quality was to explicitly describe the company's long term strategic vision for the vendor. By doing this they would make sure that both parties had the same view of the long term goals, and the vendor would understand in which direction the company wanted to go. The companies that we interviewed who only had outsourced minor tasks such as support and security did not face the dilemmas as the other companies. In these cases the agreement and KPI's was relatively easy to set and to follow up. For them it was quite easy to identify when the vendor did not deliver according to what was stated in the contract.

In order to track and manage the value delivered, the largest company that we interviewed (Company Telecom) had introduced performance managers. These roles were dedicated to monitoring the vendor performance and continuously work with improvements of the way services were delivered by the vendor. It was not surprising that it was the largest company that had taken this step since they will normally have more resources at hand to work with single issues in a dedicated manner.

### 4.6.3 Interfaces and forums

When it comes to vendor interfaces, the respondents explained that forums were the structured way of how to interact with the vendor. All companies used one or more forums to manage the relation. What was common though was that they did not create new forums for the new situation. Instead, the companies used existing structures and mirrored their structure on the vendor side. The forums were described in different levels, strategic, tactical and operational. In cases where outsourcing was only a small part of the business the operational and tactical forums were emphasized. In larger deals, a lot of attention was put on the strategic level since these questions had a large impact on the business and its performance.

A couple of the companies (Company Appliances and Company Telecom) approached the outsourcing by using a normal project approach. These companies did not make any

difference between an ordinary business project and an outsourcing deal. But this view was not supported by the other respondents. A difference between these two groups was that the ones using a project approach governed the vendor through a project steering group. So in these cases this steering group would correspond to the strategic forum that other companies used. Further, we could also see a difference in the frequency of meetings. When the companies used a few larger vendors they would have more regular meetings with the vendor, which is what you also might expect since these will impact the organization to a larger extent. A difference was that within mature companies with a large IT operation, an efficient forum structure already existed and the companies only mirrored these forums against the vendor and that worked very well according to the respondents. The forum in small operations was in some cases not as developed.

# 5. Analysis

## *5.1 Framework/approach*

In order to answer the question of how the internal IT function manage its changing role and how the role changes during outsourcing of IT services, we have chosen to conduct the analysis along the categories used to describe the IT function in the theory chapter. So the dimensions of IT functions' characteristics is used, and the outsourcing theory is then applied as explaining variables, helping us to elaborate on the reasons behind the empirical results we have actually found.

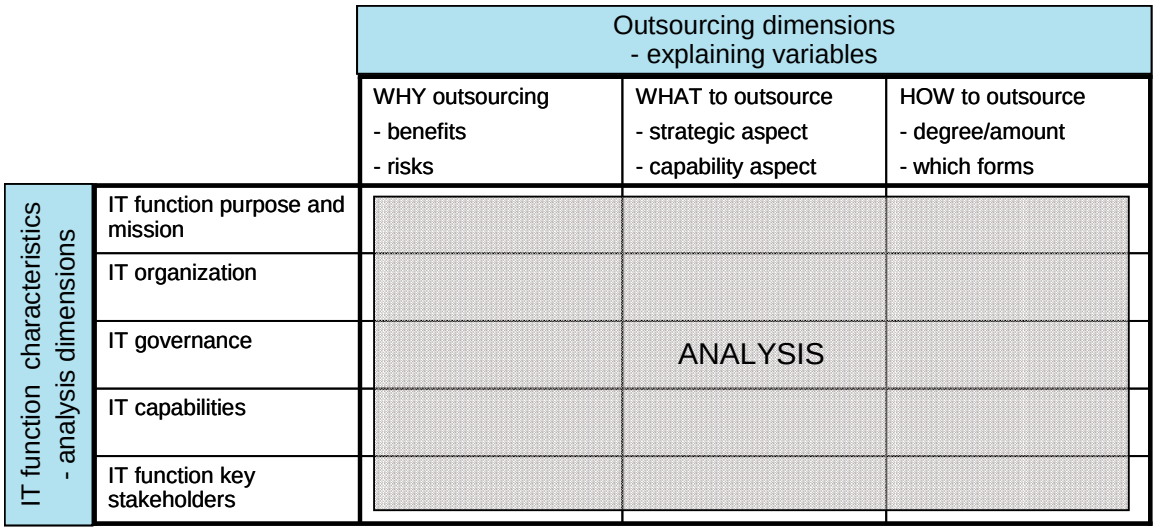


*Figure 1, Analysis framework*

## *5.2 IT Function purpose and mission*

### 5.2.1 Alignment of IT strategy with business strategy

What we have seen during the interviews is that outsourcing in itself is a way for the internal IT function to align to the business strategy. Outsourcing should therefore not be seen without its context. The company's management team is affecting the IT decisions on a high level by setting the company objective and then letting the IT function execute strategies and actions accordingly. Seven out of nine companies used outsourcing fully or partly for reducing the costs, which supports the notion that cost reduction still is the most common reason for outsourcing (Lacity & Hirschheim, 94; Capgemini European

CIO survey 2006). The other two companies (Company Medical and Company Travel) used outsourcing mainly for flexibility and growth, which was also linked to their business strategy of keeping the support departments slim. These two companies also stated that for this reason they used several vendors which is what literature proclaim to be the advantages with selective sourcing (Lacity et al., 1996 ; Lacity & Willcocks, 2000). What we can see from this result is that the overall purpose and mission of the IT function does not change when using outsourcing, rather outsourcing is used to support the overall strategy. Our findings point to that the changes taking place within the IT function is rather connected to the way that IT will fulfill the overall goals of the company. In this case, *how* the internal IT function organizes its departments, personnel, processes, etc in order to secure that IT services are delivered. Further, this does also indicate that outsourcing can be an enabler but potentially also a disabler for reaching certain goals. The effects will be described more in depth in the following sections addressing the different aspects of the internal IT function.

### 5.2.2 Outsourcing's effect on innovation

A challenge when outsourcing is to maintain the speed and efficiency in innovation and business development since part of the services delivered comes from an external vendor. In quite a few cases we have seen that the relation does not work out according to plans, i.e. the vendor does not take an active role in understanding the company's business and suggest improvements. One major problem described was the lack of pro-activeness from the vendor. As the success of all outsourcing deals were said to be based on trust between the parties the lack of communication could be one factor making it hard for the vendor to support the innovation process. What we did find was that in some cases innovation was obstructed by outsourcing. The physical distance to the vendor also seemed to increase the communications problem. As innovation could be seen as something very close to the core of the business, having the vendor support the innovation process will be a difficult as such. The findings underline the need for managing the relation with the vendor more cautiously, which would in the end result in lower costs and also support the innovation process.

In our research we have not found any empirical evidence which supports the outsourcing rationale that by using external vendors the company can gain assess to cutting edge technology and competence (Lacity & Hirschheim, 1993). Quite on the contrary, not even one of the responding companies stated that they thought their innovational abilities had increased. One possible explanation would be that although the vendor might have access to the newest technology and competence, it is likely to lack the profound knowledge of the industry and its specific client-company. This could be seen as a paradoxical situation where the initial innovation problem/challenge just switches owners from the company to the vendor. In order to overcome this dilemma the relation needs to be managed as a collaborative partnership rather than an ordinary buyer-supplier relation. One way to this is to involve the vendor in more of the company's processes than just the contracted ones, thereby increasing their understanding. The up-side for the vendor will in this case be a more secure and stable relation with potential for increasing the share of service delivered.

We also found empirical evidence that the smaller, incremental changes of new system enhancements tend to decrease. This could probably to a great extent be explained by the automatic standardization process in connection to outsourcing, requiring e.g. both more managing decisions, business cases and project method adaptation, for carrying out changes and improvements. It does further support the finding that innovative IT solutions are not likely to *increase* by using outsourcing in the traditional way since the employees' creativeness will suffer from bureaucracy. We believe that another explanation to the empirical findings could be found in the contract and the relationship to the vendor. For natural reasons, the innovative aspects are extremely hard to capture in a contractual agreement and could therefore be seen by the vendor as a risk that in the end will jeopardize the renewal of the contract. But when relationships go sour, for example due to unexpected costs or perceived low service levels, it causes an irritation between the parties, making it hard to get anything more out than what is covered in the clauses of the contract.

## *5.3 IT Organization*

The respondents stated clearly that the organizational set-up did not change in any significant way when using outsourcing. Keeping the organizational structure was seen as a good way to maintain continuity. The theory around outsourcing also underlines the risk factor of outsourcing transitions. Ross and Westerman (2004) states that outsourcing is likely to imply changes on processes and application, so from this perspective there will be changes in the way that work is carried out. A logical reason then for not changing the organizational structure is to secure that the services delivered by (or through) the IT function will not suffer from the outsourcing transition. Changing the processes, i.e. the way people work, is a radical change in itself that would surely not benefit from changing the overall structure as well. Another reason for not changing the structure could be related to the argument that only non-core or non-strategic activities should be outsourced (Ross & Westerman, 2004). The strategic IT activities are the centre of the IT function encompassing the most important parts, which could then be another motive for not needing to change the overall structure as these activities will remain the same. There is another potential reason for not changing the organizational structure significantly, and that is based on the empirical findings related to forums and interfaces. The findings from the interviews reveal that most companies were keen on using their existing forums when incorporating the vendor into the processes. Since organizational structure and forum structure goes hand in hand, the companies would most probably have to redefine in which forums certain decisions was taken (forum agenda) and which roles that should participate if the organization was altered.

A final remark concerning organization structure is that outsourcing was often viewed as another way to *deliver* IT services to the organization. This statement actually says that it is the process that is subject for change when outsourcing and not the actual organizational structure. What we can conclude from this is that the organizational structure is another factor than the IT processes and perhaps not subject for changes per default when using outsourcing.

### 5.3.1 Centralization versus decentralization

The empirical data showed that seven out of nine companies thought that the balance between centralization and decentralization did not change at all when using outsourcing. Within small IT functions it is easy to picture a manager that is involved in most decisions, i.e. being very centralized. Using outsourcing would then decrease the number of employees or in sometimes remain the same. What is more interesting though is that the balance did not seem to change even in medium and large IT functions, according to the respondents. Even in the large outsourcing deals with Company Telecom and Company Candy, where more than 50% of the staff was taken over by the vendor, the axis did not shift. These empirical findings support Earl et al. (1996) statement that the axis of centralization and decentralization does not necessarily need to change in these situations. Although, Forrester (2005:b) and Earl (1989) argues that centralization could be done to benefit on synergies and lowered costs. So why is it that the companies looking for cost reductions did not centralize during the outsourcing transition? The answer could be that the outsourcing deal is a big transition as such, often with aim of generating cost reductions and centralization initiatives are hence treated separately. Connecting to the discussion regarding organizational changes and transition risks (Ross and Westerman, 2004), this is clearly one potential reason for taking one step at the time and not doing too many changes at once. Further, as Lacity and Hirschheim (1994) describes, a benefit of outsourcing is to get a clear picture of the IT costs. From this aspect you could argue that it do not exist a great need for centralizing the IT department since the control of costs would increase due to the outsourcing deal, and the management would consequently expect a better view and understanding of the cost drivers. Further, the reason for the IT function not becoming increasingly decentralized, i.e. pushing the decisions further down in the organization (or even to the vendor), could be that the IT managers wishes to keep the control of what is left. In addition, since decentralization is not generally viewed as an act that supports cost reductions, this could work against the overall objectives and also send the wrong signals to the organization.

## *5.4 IT Governance*

### 5.4.1 Formalization and standardization of processes

A strong and coherent opinion was found while looking at how outsourcing affects the operational and decision making processes. All companies stated that standardizing the operational processes was needed before outsourcing. The notion of standardization seems to be closely linked to a wish to gain control and understanding over a certain activity. Not to outsource problem areas has been a warning issued by numerous researchers, among them for example Lacity and Hirschheim (1994) who mention it to be one of the most common problems. One of the reasons mentioned in favour for standardizing the processes and increase the understanding was that it otherwise would be hard to design the agreement in the right way with KPI's set at the right level. This finding is in no way surprising but nevertheless interesting in relation to the opinion stated by the Company Construction that believed that standardization would in most cases reveal that some services were actually cheaper produced in-house. Getting control of the business will facilitate comparison of the cost for the current processes and the cost for outsourcing the same processes, which in the end means higher predictability of the future state and lowered risk. The second aspect of this issue was that after the outsourcing transition had been conducted there was a much more formalized and standardized way of working within the internal IT function. This could both be viewed as and advantage and a disadvantage. Building on Rockart et al. (1996) theory on IT people lacking general business skills, this could be one way to improve the decisions made within the IT function. I.e. having a more formal process where decision has to be anchored and validated to a higher extent will secure that all initiatives follow the strategic objective and also keep unnecessary IT costs at bay. Further, as one of the strategic benefits of using outsourcing is to focus more on value adding activities (Ross & Westerman, 2004; Erber & Sayed-Ahmed, 2005), this could be viewed as a way of securing that only initiatives that are value adding will be executed. Another explanation to why the processes were more formalized after outsourcing is simply that outsourcing was many times seen as a cost reduction initiative, which goes hand in hand with a higher degree of control. What was interesting was that Company Construction, who had a long

experience of sourcing services from contractors, actually had the standardization and simplification of processes as one of the main goals with the outsourcing. They obviously saw a different benefit of using outsourcing compared to the others, which could perhaps be explained by a higher degree of maturity and/or understanding when it comes to the whole process of managing vendors.

Concerning the negative effects of formalization, we concluded earlier that some of the flexibility was perceived to be lost, affecting not only innovation but perhaps also the responsiveness in the organization. In addition, as the business side and IT side in companies often have problems understanding each other (Rockart et al., 1996), this could increase the tension between the parties. In cases where the IT function takes a long time to make decisions and is not willing to do the small, day-to-day fixes that they did before; the business side will view them as being highly inflexible. On the other hand, you could argue that if the processes and level of formalization was widespread throughout the whole company it would rather help in setting the expectations on the right level between IT and the business side, thereby decreasing the risk of dissatisfaction between the parties.

## *5.5 IT Capabilities*

### 5.5.1 Competencies & roles

**Sourcing skills**

All respondents agreed that the most important competence to keep in-house was the competence of knowing what and how to buy/order from the vendor. This was not surprising since numerous researchers support this belief (Willcocks et al, 1997; Feeny et al., 1995). Knowing your systems and knowing your business, and not outsourcing core processes or core competence, is adapted as a “rule” in the business today. The problem that some companies faced was rather related to implementing this rule; which are my core processes, and which people has the crucial competence? Company Telecom and Company Candy had both made their homework of analysis before outsourcing but still failed to get a proper and balanced solution in place. In both cases, the split of responsibility between the vendor and the company regarding processes or which part of

the processes was not fitting the situation. The reason could be that they had cost as main driver and consequently outsourced too much of the competence, thereby letting the vendor get too much of that crucial competence. Further, both these companies had outsourced a substantial part of their IT department and services, ranging from development to maintenance activities and this could also be a driver for increasing the risk of failure. Another reason could be that IT processes are often highly integrated in the business, making them hard to isolate as Lacity et al. (1995) points out. This is certainly valid for the development processes where the business side is usually integrated. Maintenance and operation of current systems and current applications is, when compared to development activities, much less complex and more straightforward you could assume. It is also easier to manage the contract, KPI's and vendor around something that is a daily operation since you now what to expect in a higher degree than with development which is not easy to formalize. Therefore we believe that sourcing of development services will in general be harder and must hence be approached and managed in a different way.

Based on Willcocks et al. (1997) categorization of IT capabilities, the third capability "Delivery of IT services" is often the one capability subject to greatest impact when outsourcing. As the authors state, sourcing skills become very important when outsourcing this type of services. Company Construction was particularly interesting from this aspect. The outsourcing deal had been quite successful and they were very satisfied with their vendor and how the relation worked out. The major reason for this, according to the respondent, was that while being a construction company they had built sourcing competence from the very start of their company. It was a part of the core processes and the consequence was a treatment of the IT vendor as any other vendor. By having that experience of dealing with sub-contractors in general, Company Constructions' staff was trained in contract management, setting agreements and following up, tasks that Feeny et al. (1995) claim are among the most important when it comes to outsourcing. This underlines the importance of having sourcing skills within the organization.

**Business understanding**

All four categories of capabilities that Willcocks et al. (1997) elaborates on are connected to the understanding of both IT and business. Also Rockart et al (1996) underlines the challenge of dual understanding, i.e. that IT people often lack business skills. A few respondents stressed the importance of having the "right type" of people on key roles. Company Medical and Company Appliances had used persons from the business side for staffing IT manager positions, which supports the theories about business understanding being critical. Thus, in the new situation dealing with the vendor could be viewed as important as having the right IT knowledge. Another side of this is that the companies have kept and increased focus on roles that add much value to the business and have outsourced the more standardized commodity roles. We believe that this is an effect that comes from outsourcing the non-critical processes and activities and keeping the core value adding processes inside. From one perspective an outsourcing deal is also an opportunity for a manager to clean up among the staff, keeping the persons that add value but also supporting change by bringing in new competencies.

A final remark on the need for business understanding is that vendors naturally lack some business understanding and insights, being an external part. And only because of that reason the company must be able to communicate this business understanding to the vendor. Since communication and relationship skills will be one of the important competencies needed for a successful relationship it will also be crucial for a successful outsourcing. We will elaborate on this subject furthermore in the chapter dealing with "Vendor relation".

**Manager importance**

Our findings indicate that the role of the manager become more important during and after outsourcing. While outsourcing could be viewed as a change program or a transition phase you would naturally need strong leaders to guide the organization on its journey. By leading change, setting the direction and making staff feel comfortable in the new environment the general risk of uncertainty is handled, which importance Ross & Westerman (2004) describes. Company Liquor stated that they basically only kept

managerial roles, outsourcing many of the more operational type of roles. Communication skills and strong abilities to get things done correctly, which have been concluded as important skills when using outsourcing, are often seen as general "manager competencies". This also supports our findings of the manager role becoming increasingly important in these types of situations.

**New roles and competencies**

As touched on earlier, Company Telecom had as one of very few companies implemented completely new functions due to the outsourcing, *Vendor management* and *Performance management*, just as Feeny et al. (1995) have suggested in their theory. This could be seen as a way to highlight the importance of managing the vendor and securing the delivery of IT services. By organizing the work in such a group you put an understandable objective in focus and thereby minimize the risk of neglecting these important issues. As another theory suggests (Forrester, 2005:b), large companies such as this one can afford to have less shared roles and more dedicated resources that could focus on certain tasks than a smaller company. This could partly be an explanation to why Company Telecom, with around 5000 people working with IT before the outsourcing, made this decision. What is interesting is that when analyzing the outcome of the outsourcing deals conducted by the respondent companies, Company Telecom is one of the companies that were described as having large problems during the transition. We have earlier concluded that these roles seem to be important for the internal IT function, but will obviously not guarantee the success of the outsourcing solely. Looking at Company Construction who already had the vendor management capabilities (described above) they did not perceive any problems with their outsourcing deal. Ultimately the success of an outsourcing transition will depend on several factors, vendor management being one of them but maybe not as important as the theory suggest (Feeny et al. 1995). Since other companies was described as being very successful in its outsourcing without creating a separate group around vendor management, you could assume that lack of day-to-day operational involvement might be an important factor.

### 5.5.2 Training

In our interview we found that only three out of nine companies (Company Medical, Liquor and Construction) had supported the personnel with any form of training during the outsourcing transition, despite the positive comments on the need of training from these companies. Interestingly, Company Candy explicitly said that lack of new roles or training could possibly be one of the major reasons to why their outsourcing had failed in terms of both cost and quality. In Company Candy's situation there was lack in vendor management that was seen as one of the drivers for the huge outsourcing costs. Training could be a way to minimize what Ross & Westerman (2004) refers to as "transition risk", ranging from pure technical challenges to the general risk of changing an organization. This is highly relevant when the transition is quite large and in addition done rapidly. What we have seen empirically is two cases (Company Telecom and Company Candy) where the outsourcing deal encompassed a lot of people and was done at one time, and in these cases there was major problems with lack of competence when the split was done (both these companies eventually took back a number of people/competencies from the vendor). The need for training will of course differ between companies and situations, but what seems to be important is to asses the need for training, e.g. competence gaps in project leadership, negotiation skills, new technical requirements, etc and take actions based on this analysis before the outsourcing is executed. Training could also have symbolic impact on the personnel that stays within the internal IT function, communicating that despite changes the company is prepared to invest in the people that are left. As the management put a lot of attention to getting efficient processes in place before outsourcing, perhaps they underestimate the need for training the people actually handling the business. The reason could be the vast focus on what to outsource, attention to the processes and/or attention on designing the contract, forgetting the people running the business. As Ross & Westerman (2004) points out that it is important not to underestimate the need for both time and money during this kind of transition phase. Further, Linder (2004) describes a new emerging view on outsourcing that focus more on fundamental organizational needs (addition of capabilities, facilitate strategic and structural change) than to reducing costs. This "transformational outsourcing" approach

is perhaps better from an employee perspective since it put focus on the people working in the organization to larger extent.

## *5.6 IT Function key stakeholders*

### 5.6.1 Vendor relation

Considering how much time and effort that is put into reengineering processes, choosing vendor and designing SLA's it was rather surprising that "trust" was stated to have such an impact on the outcome of the outsourcing deals. Based on the interviews we interpret the meaning of trust as the vendor being genuinely interested for the company's situation, trying its best to solve problems and deliver value even if the agreement sometimes is vaguely stated. Further, having a trustful relationship is also something that the company can rely on, for example solving problems as fast as possible, being proactive and consistently try to improve the delivery of services. As Earl (1989) and Rau (2004) pointed out it is highly important to manage all stakeholders to ensure that exploitation of IT is maximized, outsourcing vendors being one of them. This statement indicates that to exploit IT efficiently in an outsourcing deal you have to continuously work with the vendor and not only view the contract as the core of the relation, but also the actual relationship and the people on the other side. You could view this issue from aspects of hygiene factors and motivating factors, where the agreement and SLA are just hygiene factors for making it work, and trust is in this case more of a motivating factor making it a success.

### 5.6.2 Securing quality and value

Important factors brought up when discussing how to secure quality and value in the deliveries from the vendor was SLA's and KPI's, but also other factors. The companies stated that having regular meetings, building a relation to the vendor and communicating the vision and strategy was equally important for receiving high value. Looking at an outsourcing deal from a value chain perspective the vendor overtakes one or more parts of the chain. Our findings point to the vendor needing to take a role similar to what an internal function would have had. Imitating this kind of behavior would imply that the vendor would always work for the best of the company in any given situation in order to

maximize the companies result. They would be interested in giving high service and understand how they could participate to the overall goals and objectives of the company. This would minimize what Ross & Westerman (2004) refers to as vendor-client risks.

Coming back to KPI's, we could see a difference in complexity between minor outsourcing and large outsourcing, in particular in those executed at one time. In larger deals there were obviously a bigger task to state all KPI's for all services in the agreement. But relating to our finding that some of the companies had started in small scale and gradually increased the outsourcing, we see that this procedure could be one way of securing that quality is kept at a high level. Company Construction also emphasized that setting the right service levels and KPI's before outsourcing could be hard if you are not used to it. Further, Company Construction did not perceive to have any problems with getting high value from the outsourcing partner since they had the experience of setting up agreements that fit these situations.

### 5.6.3 Interfaces and forums

As mentioned earlier the responding companies have not created any new forums for dealing with the vendor relationship, which seems to be derived from a wish to maintain stability in a changing environment. Too many changes at once might create even further transition cost (Ross & Westerman, 2004) in the form of unclear responsibility areas and lack of communication. Company Appliances and Company Telecom approached the IT outsourcing situation with a "normal" project approach, making use of a steering group (with vendor participation) to function as a forum at a strategic level. A benefit of this could be that the project method is vastly understood in these companies so all the people involved from the company side will think in familiar terms. An example of a situation where a project approach can be useful is in the planning of the transition. Using a standard method with clear gates and delivery points that is understood by all employees will facilitate the work carried out. Thus, in companies that have a poor or lacking forum structure, a project approach could be useful if it is known throughout the organization.

Focus on core operations and competence is often stated as a reason for outsourcing, (Ross & Westerman, 2004; Erber & Sayed-Ahmed, 2005) meaning that time and resources can be put on the things that really add value to the business. Despite that some things are more important than others there is still a need for having efficient non-core processes that can support the business. So in one sense the things that you outsource still needs to work properly and the company still needs to secure the interaction with the vendor through forums and other channels. Although we have not found empirical facts where a company explicitly lacked good forum structure and experienced a major problem, due to this you can assume them to be a prerequisite for making the outsourcing work. What we did find empirically were companies that stated that the relation in itself was not good. The conclusion could therefore be that poor communication with the vendor could get accentuated if the interface itself does not meet the needs of the two parties. Further, if the forum is to work as planned it is important to be able to have meaningful dialogues in the forum. The input into the forum, i.e. information available to the participants, could be considered as important as the structure itself. By having high-quality data on the table the participants can focus on solving a problem (instead of discussing what the problem is) and developing the relation based on improvements areas identified or even quantified. In other words, having roles that can supply this type of information by keeping track of the vendor performance would mean a lot for improving the overall transparency of the outsourcing.

### *5.7 Main findings concluded*

The matrix below summarizes the main findings within each area. The table highlights the challenges faced when outsourcing and also elaborates on the issues driving these challenges.

| Area | Effect from outsourcing | Critical aspects to consider | Explaining variables |
|---|---|---|---|
| IT Function purpose and mission | No significant change.<br>Outsourcing was found to be a way for management to adapt to overall business strategy Negative impact on innovation due to less flexibility and higher formalization. | Outsourcing could be done in several ways. The approach, objectives and risks undertaken will have consequences on the organization and the result<br>Hard to *improve* the IT innovative ability through outsourcing. If IT is core within company's innovation process, specific attention should be paid to this aspect | The form and degree of outsourcing, connected to the level of risk undertaken, affects the alignment of outsourcing, IT strategy and business strategy.<br>Conducting outsourcing as a cost reduction initiative could be negative in an innovation perspective. |
| IT Organization structure | No substantial changes. One company had formed a function for vendor management. | In a turbulent time, changing structure could imply confusion in the organization.<br>Vendor relation is critical and changing structure could imply changes in forums, which would have a negative impact | Organization and processes are different things, where the latter is more affected by outsourcing.<br>Transition risk increases when both processes and organization structure changes. |
| IT Governance | More standardized and formalized way of steering.<br>Longer decision time, less room for small informal changes, but more control & more cost efficient in the long run. | Knowing what to outsource is key for not loosing control.<br>Maintaining speed while having so much formalization is a challenge.<br>The decision making process could become too long to support informal improvement work. | Control of organizational cost drivers more apparent (financial motive/factor) since outsourcing is often used as a cost reduction tool.<br>Outsourcing some IT services calls for more control in general of e.g. external deliveries, invoices etc. |
| IT Capabilities & roles | More focus on sourcing competence, business insight and general manager skills. New roles focusing on the vendor relation. | A hygiene factor in outsourcing is to keep some expertise in-house in order to manage the services delivered from the vendor. Managing the transition also calls for business know-how and manager skills, which could be improved by bringing in people from the operative side. Training is one way to adapt to the new situation and should be used when the organization is immature in dealing with external parties. | The capability aspect is connected to what to outsource and how to manage the vendor.<br>For the vendor to meet expectations and be proactive, the relationship and communication is critical. Business understanding could be equally important as IT skills in this case.<br>A benefit could be the opportunity to renew the internal competencies when making changes in the employee base. |
| IT function key stakeholders | More focus on managing the vendor, focus on contracts and KPI's.<br>Securing that value is delivered became a more explicit and more continuous process | Securing trust in the relation is often highly important, which indicates a partnership approach.<br>The success of outsourcing will also depend on the vendor's performance.<br>Emphasis must be put on having forums with clear responsibility and agenda so that interaction with the vendor can be efficient in the formal work. | Vendor risk is a driver for continuous securing of commitment.<br>The number of vendors used and for what services will affect the need for managing the trust. A commodity type of service needs less trust since it can be specified and bought from several different vendors. |

*Table 3, Main findings from the analysis summarized per area*

# 6. Conclusion

This essay has shown that regardless to respondents' size, industry and degree of outsourcing they do not believe to have gained innovative advantage by using outsourcing. Instead, innovation was sometimes viewed as being harmed. We have earlier identified some possible explanatory variables for this fact; the physical distance hindering effective communication, vendor's lack of profound industry knowledge, incremental innovation hindered by standardization and cost cutting and the problems with incorporating innovation into a contract. We believe that these factors combined create a barrier for innovation to flourish.

When it comes to organization it has become clear that the set up in many aspects remain unchanged going into the outsourcing arrangement. By looking at outsourcing as just another way of delivering IT service to the organization, the actual process comes in focus as the part needing to be changed more than the organizational structure. Further we conclude that the lack of organizational changes in structure and forums indicates that the companies wish to minimize transition and supplier risks, choosing to keep as many organizational factors constant as possible. As an outsourcing deal is a strategic decision that has a long term impact on the IT function, the managers need to start looking further into the future. Such typical strategic questions would be whether to sign contracts that spans over many years or short ones, evaluate alternatives for changing vendor and exiting deal or even the ability to in-source some parts in the future.

From our findings we can conclude that processes have to be formalized and standardized before the deal for the outsourcing arrangement to be successful. The reason is that it makes it easier to understand what the internal IT function does. Based on this you can compare the cost for the current operation and the cost for outsourcing the same operation, creating a higher predictability of the future state and lowered risk for outsourcing something that you can not control afterwards. A negative aspect revealed, and which need to be managed, is the loss of flexibility, not only affecting innovation but also the responsiveness of the organization. Building on this, using outsourcing could

also increase the need for internal communication since the IT function could be viewed as a bottle neck by the business side of the company.

Within the internal IT function the area showing perhaps the most evident adjustments are the changes in competences and roles. The sourcing skills; knowing what to outsource and handling the vendor relationship has shown to be a critical aspect for the “new internal IT function”. Although the golden rule of outsourcing to keep core competence in-house is common knowledge in today’s business world, we have seen indications of difficulties in implementing this rule. Knowing the actual scope of the core processes is in practice not so easy and the consequence could be outsourcing too much, which creates an unbalance between the company and the vendor.

One noticeable trend within the internal IT functions during outsourcing is to focus on keeping and developing roles that are business oriented. Since the external vendors in many cases lack the ultimate business knowledge, business understanding and relationships skills are crucial components for being able to communicate what and how things should be done in order to support overall objectives. Outsourcing deals are sometimes managed as “projects” making project leading skills a necessity in handling both people internally and the vendor externally. The challenge is to make sure that what is contracted will be done and with the right quality. Prior experience with handling external vendors, in particular regarding sourcing/buying skills, also tends to have an impact. If you do not fully understand what services you are buying from the vendor you will not be able to steer and control that the things carried out is actually supporting the overall strategy. One way to manage this is therefore to appoint specific roles that are responsible for the vendor relation and performance.

Training was, when used, perceived to be very important in the process of supporting the staff internally. It was though surprising that only a few companies had used this tool. Considering the huge impact an outsourcing deal often has on the employees in terms of changing roles, tasks and also the mental impact of having colleagues leaving, we believe

that training could be a relative small investment for eliminating insecurity compared to the value of the outsourcing contract.

The relationship one build with the vendor has proven to be crucial for maximizing the outcome of the outsourcing deal. The contract, although stated as crucial, is only one part for having successful outsourcing. Since the overall agreement has a static nature, a well-functioning relationship with the vendor is vital for being able to maintain flexibility and being handle unforeseen problems. In many cases the vendor takes over several steps in the IT value chain, making its role similar to the old IT function within the company. Therefore, in order to maintain the same service level as before it is necessary for the vendor to understand the overall goals and objectives of the company so it can work to support them and not the other way around. Although not easy to define or to state in a contract, an important key to a successful relationship is trust, which is an aspect that we believe existing theory does not stress enough. All the respondents interviewed that were satisfied with the outsourcing arrangement point to trust as a key element. Our findings point to people and relationship management being at least as important as the actual form and scope of the deal.

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**Complementary Interview:**

Mats Alerius, Vice President, Capgemini Technology & Outsourcing Services, 06-02-02

**Appendix 1**

**Questionnaire:**

Company:
Number of employees:
Employees within the IT department (today and before)?
Since when are you using outsourcing?
What activities have you outsourced?
To what degree have you outsourced (only parts or everything)?
How many different vendors are you using?
Where are they located geographically?
Have you changed the vendor during this time?
Who initiated the outsourcing?

**1. Organization**

- What are the major differences in the organizational set-up today compared to before?
- What organizational changes were required in the new set-up?
- Are the decisions taken more centralized or decentralized today in general?
- Have you experienced a need for more structure/standardization due to the outsourcing?
- Describe the interface towards the vendor in terms of roles and process
- How do you control the vendor and its operation?
- Have new forums been set-up?
- How do you secure that business and IT strategy is aligned?
- How has this changed?
- How has the governance changed?
    - How do you measure and secure the quality/value?
    - Are new measures needed?
    - Have you changed the principles around steering?

**2. Roles & Competences within the IT function**

- In this new situation, how has the competence need changed?
    - Which competences existed before?
    - Which competences exist now?
    - Which competences are crucial for the new situation?
    - Have the personnel had any form of training in this matter?
- How has the composition of roles changed?
- Have new roles been appointed? Which?
- Which roles are less important now in this new set-up?
- Which roles have become increasingly important?
- Who is responsible for the SLA, including follow-up?

**3. Innovation/business development**

- How has the ability to affect innovation and/or business development changed?
- How was it done earlier (the process)?
- How is it done today (the process)?
- Is there a need to innovate/develop less or more compared to before?
- Are their certain areas that are easier to influence today?
- What are the major advantages and disadvantages with the set-up today?

**4. Sourcing**

- Do you or the vendor provide the technology?
- If vendor → how do you secure that they do the job correctly?
- How has the new set-up changed your adoption of new technologies?