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Collaborative Risk Management in IT-Outsourcing:

A study to explore to what extent collaborative risk management could improve the outcome and process of IT-outsourcing

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Foreword

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Hereby I present my master thesis entitled “Collaborative Risk Management in IT-Outsourcing”. This thesis describes the interesting process of IT-outsourcing and concludes the final part of my master study ‘Management, Economics and Consumer Studies’ at the Wageningen University. This thesis offers insight in IT-outsourcing and provides practical value for organizations in the form of a checklist to identify risk factors.

During these last few months I've learnt many things. Not only about conducting scientific research and IT outsourcing, but also how organizations actually work in reality. This project gave the opportunity to meet very interesting professionals and to have a look in the kitchen of fascinating organizations.

I would like to express my gratitude towards all the people who took the time and effort to support me throughout this research project in every way they could. I want to personally thank my supervisor, Eli de Vries, from the Wageningen University. I really appreciated the pleasant cooperation and his guidance, feedback and input in order to guarantee a certain level of academic proportion.

Last but certainly not least, I would like thank my mother, brother and sister for being there for me when I need them.

Hilko Ploeger,

March 2010

Summary

IT-outsourcing includes turning over a client organization's computer operations, network operations, software development and maintenance, or other IT functions to a service provider for a specified time [Pfannenstein & Tsai 2004]. Motives and advantages of outsourcing are a strong focus on the core business, cost reductions, improving the service quality and gaining access to the latest information technologies. Reality shows that IT-outsourcing projects are not always successful. Client organizations indicated in research, performed by Giarte [Outsourcing Performance 2008], that there is still potential to improve IT-outsourcing outcomes and the relationship with the service provider. Information managers and directors indicated in the ICT-Barometer [Ernst & Young, 2009] that they will try to improve their outsourcing results by performing risk management. Client organizations may fail to realize the expected benefits from outsourcing because they face risk factors that endanger the outsourcing process and/or outcome. The collected risk factors in this thesis have been divided in three groups related to the client organization, the service provider and the outsourcing relationship.

The manageability of IT-projects can be increased by performing risk management [de Vries, 2003]. Risk management is often perceived as a simple process but it involves a great diversity of potential outcomes and measurement systems what makes it so complex [Ritchie & Brindley 2007]. Empirical research from Hallikas et al. [2004] shows that the quality of the relationship and outsourcing success have a strong positive relationship. It indicates that stimulating a cooperative relationship based on trust, business understanding, benefit and risk share, and commitment is critical to reap the greatest benefits from IT-outsourcing. The strength of a successful partnership is that it enables both organizations to achieve the organizational goals and builds a competitive advantage that each organization could not easily realize by itself. It is assumed in this research that collaborative risk management improves the quality of the partnership and therefore indirectly improves the outcome and process of IT-outsourcing. To get a clear view on the current situation of IT-outsourcing a mix of desk research and explorative meetings have been used in this research. Different experts are consulted in face-to-face meetings, group discussions or seminars

Qualitative interviews with ABN AMRO and Capgemini have been performed to get insight in practical outsourcing projects, procedures, risk factors and risk management. Data from desk research and explorative meetings with other experts have been used as input for the questionnaire. The aim of the questionnaire was to obtain information about the possibilities and effects of performing collaborative risk management in IT-outsourcing. Based on these interviews several conclusions are drawn. Both the literature and empirical research indicate that there is still room for a lot of improvements, especially in the project management skills of client organizations and the relationship with the service provider. Most risk factors endangering the outcome and procedure of outsourcing are related to the

client organization. Here lies most potential to improve outsourcing results. The client organization and service provider remain two separate organizations, both looking to make profit. The service provider can not share its profit strategy with the client organization which makes collaborative risk management very difficult. Literature and empirical research indicate that both organizations do see the advantages of cooperation in outsourcing, in some degree. However, the management and realization of a close cooperation remains difficult. It is concluded that experience in outsourcing is key in the understanding and management of the process. Client organizations that do not have any experience with outsourcing should 'collect' this experience and knowledge to get a better understanding of the process and consequences of outsourcing. An outsourcing agreement should not only address operational, financial and relationship matters and the parties' respective obligations and rights and remedies. It should also prescribe a framework for dealing with unforeseen circumstances and managing change through the term of the agreement.

This research provides scientific relevance because it examines the possibilities of extending single organizational risk management activities with collaborative risk management activities in order to improve the success in IT-outsourcing. Furthermore, this research contributes in the categorization of the collected IT-outsourcing risk factors. This research has managerial relevance because it provides a tool, the IT-outsourcing checklist, which enables IT-outsourcing managers to identify risk factors and to (collaboratively) think of measures to battle the identified high risk factors. The checklist consists of four risk aspects: the client organization, the service provider, the outsourcing contract and the performance & relationship.

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Chapter 1- Introduction

1.1 Introduction

The traditional perspective of an organization, in which most different value chain activities are performed internally, is being replaced by the idea of a network organization, in which less activities are performed within the organization and move outside the barriers of the own organization [Gonzalez et al. 2005; Burn & Ash, 2000]. Only those activities which generate added value and represent the organizations' competitive advantage must be performed internally; the rest of functions could be outsourced [Gonzalez et al. 2005]. Some of the activities which organizations often opt for outsourcing at present are those related to information technology management. Information Technology (IT) outsourcing means that the physical and/or human resources related to an organization's information technologies are going to be provided and/or managed by an external service provider. Outsourcing can be temporary or permanent, and can affect the client organizations whole IT, or only a part of it. IT-outsourcing can be traced back to 1963 when Electronic Data Systems (EDS) signed an agreement with Blue Cross for the handling of its data processing services [Hirschheim and Dibbern 2002]. IT-outsourcing has experienced a considerable growth in recent years [Baldwing et al., 2001]. However, reality shows that IT-outsourcing projects are not always successful.

This research aims to provide insight for client organizations that are willing to outsource a part of their Information Technology development functions to an external outsourcing service provider. IT-outsourcing risks, collaboration and risk management activities that could influence the outcome and procedure of an IT-outsourcing project will be examined. The findings have been translated into recommendations and the creation of an IT-outsourcing checklist. This research has been performed under the authority of the Wageningen University and Coppa Consultancy (Coppa). Coppa is an independent consultancy agency specialized in procurement, logistics and cooperation.

This chapter provides a general impression of the IT-outsourcing environment, the research context and topicality of this research project. This will be followed by the definition of the research problem and the research methodology. Finally the structure of this report will be discussed. Chapter 2 describes the theories that explain the behavior in outsourcing, collaboration and risk management. Chapter 3 describes the IT-outsourcing process, motives and activities in a more detailed level. Chapter 4 elaborates on risk factors and risk management activities in IT-outsourcing. The final theoretical chapter 5 discusses the concept of partnership and collaborative risk management in IT-outsourcing. The theoretical research is complemented by empirical research (chapter 6) in which a client organization and service provider are interviewed. Finally, chapter 7 presents the conclusions of this research and chapter 8 presents the recommendations and discussion.

1.2 Research context

Numerous factors and motives like: global competition, cost reductions, the move to flatter organizations, improved quality and the need to focus on core competencies of the firm have led to a growing need for outsourcing over the past years [Weinert & Meyer 2005]. Generally outsourcing can be defined as [Adeleye et al. 2004]: “the transfer of previously in-house activities to a third party”. The most common definition of IT outsourcing includes turning over a client organization’s computer operations, network operations, software development and maintenance, or other IT functions to a service provider for a specified time, generally at least a few years [Pfannenstein & Tsai 2004].

Information Technology (IT) is crucial for the successful operation of our society [Gottschalk & Karlsen 2005]. IT has developed from a futile aspect into a paramount factor for short and long term continuity of almost all organizations [De Vries 2003; 2009]. Within Europe, the Netherlands belongs to the countries that make the most intensive use of IT. It is expected that the Dutch IT-outsourcing market continues to grow [Automatisering Gids 2009]. The motives behind this growth are not only based on cost reductions. Other motives gain importance, like access to human capacity, higher service quality and the faster availability of new technologies [Outsourcing performance 2008]. In the Netherlands, the real growth of outsourcing is yet to come. Vermeulen [2003] researched the BPO expenditures and Delen [2005] did the same for IT outsourcing. The results of these researches are shown in table 1.1.

	2002	2007	Annual Growth
Business Process Outsourcing	9.3	15.6	11.1%
IT outsourcing	4.2	10.5	20%
Total outsourcing	13.5	26.1	16%

Table 1: Turnover in the Netherlands in billion Euros [Vermeulen 2003; Delen 2004]

It is shown that from the year 2002 till 2007 the annual turnover related to IT-outsourcing in the Netherlands increased every year with 20%. The absolute turnover increased from 4.2 billion euros in 2002 euros to 10.5 billion euros in 2007. Giarte and Morgan Chambers [Outsourcing performance 2008] identified the outsourcing budgets of client organizations in 2008. Table 2 shows how much money is relatively spent in the Dutch outsourcing market.

Table 2 shows how much money is relatively spend in the Dutch outsourcing market.

Outsourcing budget in billion euros a year	Percentage Outsourcing Organizations
< 0.5	23%
0.5 – 1	15%
1- 2	18%
2 – 5	20%
5 – 10	9%
10 – 25	8%
25 – 50	4%
> 50	3%
	100%

Table 2: IT-outsourcing expenditures [Outsourcing performance 2008]

It is shown that a majority of the Dutch client organizations (76%) spend yearly a maximum of 5 million euros on IT-outsourcing. It is expected that the number of strategic outsourcing processes will increase [Kranenburg, 2002]. This asks for a more pro-active and structured approach to deal with these risks [Adeleye et al 2004]. Reality shows that IT-outsourcing projects are not always successful [Outsourcing performance 2008]. Research among service providers and client organizations shows that; (1) the incompleteness and non-transparency of a contract; (2) a changing motive among the client organizations; and (3) insufficient control and cooperation are reasons for an early termination of the outsourcing contract [Oosterhaven & Roozendaal 2007]. Terminating the contract and changing from service provider has radical consequences for the client organization. The termination will result in temporally standstill or a loss in innovation and service quality. A new outsourcing trajectory can be very costly, 5 - 8 percent of the total contractual value [Oosterhaven & Roozendaal 2007; Automatisering Gids 2009]. Therefore it is of interest for the client organization to find out what factors could negatively impact the outsourcing procedure and outcome. Many lessons have been learned by analyzing failed IT-outsourcing projects from the past. But several experts 'fear' that there is still a lot left to learn [Oosterhaven & Roozendaal 2007; Outsourcing performance 2008].

1.3 IT-outsourcing market

Since the 250 million dollar outsourcing deal between Eastman Kodak Co. and IBM Co. in 1990, IT-Outsourcing has been a hot topic [Jenster & Pedersen 2000]. In the following decades outsourcing became a well-discussed and studied subject which led to many changes in the outsourcing world. Studies have been conducted by several organizations. Theoretical research has been carried out by international authors like Leslie Willcocks (University of Oxford & University of Melbourne), Mary C. Lacity (University of Missouri) and Rudy Hirscheim (University of Houston), but also by Dutch authors like Guus Delen (VKA), Han van der Zee (University Tilburg) and Erik Beulen (University Tilburg). Not only universities, but also commercial institutes explore IT-outsourcing. Giarte and Gartner are examples of companies that conduct market research [Outsourcing performance 2008]. Busi & Mclvor [2008] performed a comprehensive literature study concerning IT-outsourcing and they came with some interesting conclusions. Busi & Mclvor [2008] state that the scientific generation of knowledge, specific to IT-outsourcing, is still at an embryonic stage, compared to other disciplines like Supply Chain Management. Science is lagging behind practice, hence indicating little potential for knowledge transfer from science and education to industry. A logical result from these conclusions is that a large number of outsourcing stakeholders is left to proceed with pretty much a trial and error approach [Busi & Mclvor 2008].

Delen [2005] described how different IT-functions and systems have developed themselves in the recent years. The management of hardware and software (servers, work offices, LAN, WAN) has been standardized in a high degree and has developed itself into a commodity. Due to price competition, commodities are often being offshored to Asia. Operational ITIL-processes and the management of standardized applications (also known as 'packages') do also have the characteristics of a commodity. Commodities offer the service provider the advantages of economies of scale. Service providers can not benefit from economies of scale when they have to provide customized applications. Only off shoring can provide some economical benefits in this situation. The market for tactical ITIL-processes (like Service Level Management) is still in development. Sometimes, these processes are also being co-outsourced, but the results are often less successful than the outsourcing of operational processes. IT-strategy and -planning are rarely being outsourced. Although service providers claim to be partners, practice proves that they are mainly focusing on structuring the operational services as efficiently as possible, to reduce the costs. Hereby, they hardly focus in more proactive tactical management and rarely invest in IT-strategy and planning on behalf of their client. The operational processes of the functional management are sometimes being outsourced, but because the high degree of branch expertise and the embedment in the business processes one can regard these practices more as business process outsourcing than as IT-outsourcing.

The Automatiserings Gids [October 2009] states that the overall satisfaction related to outsourcing has increased. Client organizations judge their service providers more positively than in previous years. However, client organizations indicated in research, performed by Giarte [Outsourcing performance 2008], that there is still potential to improve their project management skills and the relationship with the service provider. Information managers and directors indicated in the ICT-Barometer [Ernst & Young, 2009] that they will try to improve their outsourcing results by performing risk management. This idea is supported by DeLoach [2000] and Adeleye et al. [2004]. They state that if the outsourcing process is not preceded by careful strategic planning and thorough risk assessment, it may result in considerable financial losses, decreased shareholder value, damaged company reputations, the dismissal of senior management, and in some cases the destruction of the business itself. Research from Morgan Chambers [Outsourcing performance 2008] shows that the satisfaction of the client organization is related to their relationship with the service provider. Service providers like to profile themselves as outsourcing 'partners', that actively think and act in the interest of the client. However, Giarte [Outsourcing performance 2008] notes that most of the client organizations do not fully support and recognize this statement by the service providers.

1.4 Research problem and methodology

As part of their project management in IT-outsourcing, organizations should perform risk management. To improve the cooperation between the client organization and the service provider, the concept of *Collaborative Risk Management* is studied. Supply chain and network theories do already apply collaborative risk management [Hallikas et al 2004]. Collaborative risk management means that the involved organizations create a common collaborative risk management strategy. The main research question of this research is:

"To what extent could collaborative risk management improve the outcome and process of IT-outsourcing?"

It is the objective of this research to contribute to the understanding of IT-outsourcing risk management by (1) studying outsourcing processes, risk factors, risk management and collaboration and (2) by providing a practical IT-outsourcing checklist.

Risk factors, failures and pitfalls that could endanger the outcome and process of an IT-outsourcing project will be studied. The existence of risk factors opens up the door for measures to battle these factors. The risk identification, assessment and mitigation strategies of both IT-outsourcing client organizations as well as IT-outsourcing service providers will be examined. In order to realize the objective, it is important to have a comprehensive understanding of outsourcing and the importance of IT-systems in organizations. These topics are discussed in the theoretical framework.

The theoretical framework offers a thorough and complete understanding of the key concepts. The starting point in the literature review is the definition of *IT-outsourcing*. First, IT-outsourcing and its related motives, advantages, history and development have been defined and described. Second, the existence and impact of outsourcing risk factors will be discussed. Several articles list numerous numbers of risk factors that could endanger the outcome and procedure of an IT-Outsourcing project. These risk factors will be summarized and categorized into clusters. For example into the STOEG framework, which consists of Social, Technological, Organizational, Economical and Governance risk factors. Once the risk factors are mapped, the concept of risk management is introduced. Risk management is divided in three steps: *Risk Identification*, *Risk Assessment* and *Risk Mitigation*.

Cases from the literature describe different kinds of risk management practices that are being performed. Next, the alignment and collaboration between the client organization and service provider will be discussed. In the empirical research several interviews and meetings have been planned with different IT-outsourcing professionals. Examples of these meetings are (explorative) interviews with consultants and professors, group discussions with risk analysts and interviews with client organizations and service providers (see appendix D). The explorative interviews serve as additional input to narrow down the exact research direction. The statements in the theoretical framework have been tested in the empirical research. Interviews with IT-outsourcing experts have been performed, within both client organizations and IT-outsourcing service providers. In the third phase of this research project the collected data, derived from the interviews, group discussions and literature, will be analyzed and translated into recommendations. Conclusions will be drawn with respect to the usefulness of collaborative risk management in IT-outsourcing projects. The final results and recommendations regarding outsourcing risk factors will be put into a checklist. This checklist enables managers to identify risk factors in IT-outsourcing.

Qualitative interviews with ABN AMRO and Capgemini have been performed to get insight in practical outsourcing projects, procedures, risk factors and risk management. Qualitative research is particularly good at constituting arguments about how things work in particular contexts, rather than representing the full range of experiences [Mason, 2002; Verschuren en Doorewaard 2003]. A practical problem is that not many stakeholders are willing to talk about outsourcing failures. Therefore the number of respondents has been low. It is assumed that an interview with a very experienced stakeholder has more value for this research than several interviews with junior stakeholders. More experienced stakeholders have intensively participated in the development of IT-outsourcing and should therefore have more valuable stories than their junior colleagues who are pretty new to outsourcing will have.

To analyze the results, both cross sectional as well as non-cross sectional indexing have been used. In cross sectional data indexing a consistent framework has been used across the whole data set. This enables the comparison between the client organization results and the service provider properly [Mason, 2002]. In cross sectional data indexing the same lens is used to explore patterns and themes

which occur across the data. Non-cross sectional or contextual forms of data organization involve ways of seeing and sorting data which do not necessarily use the same lens across the whole in this way. Essentially this form of data organization involves looking at discrete parts, cases or contexts within the data set. This second option is used to understand intricately interwoven parts of the data set, social processes, or complex narratives or practices [Mason, 2002].

This research provides scientific relevance because it examines the possibilities of extending single organizational risk management activities with collaborative risk management activities in order to improve the success in IT-outsourcing. Furthermore, this research contributes in the categorization of the collected IT-outsourcing risk factors. This research has managerial relevance because it provides a tool, the IT-outsourcing checklist, which enables IT-outsourcing managers to identify risk factors and to (collaboratively) think of measures to battle the identified high risk factors. The checklist consists of four risk aspects: the client organization, the service provider, the outsourcing contract and the performance & relationship.

1.5 Structure of report

Chapter 2 presents the theoretical framework. This chapter describes three theories that explain the concept, development and behavior in outsourcing, discuss the importance of Information technology and presents a framework for risk management. Chapter 3 describes outsourcing motives, the outsourcing process and the dimensions of outsourcing. Furthermore, the current outsourcing market will be discussed. Chapter 4 lists all collected risk factors related to outsourcing. The risk factors are divided in risk factors related to the client organization, the service provider and the relationship. Chapter 4 discusses risk management activities in IT-outsourcing. Chapter 5 describes how client organizations and service providers could move from a price based relationship to a partnership. Next, the concept of collaborative risk management is introduced. Based on the outsourcing literature and market experiences a research model has been created. Chapter 6 discusses the empirical research. This chapter presents the interviews with ABN AMRO and Capgemini and a comparison between the results. Chapter 7 consists of the conclusions and chapter 8 discusses the recommendations and discussion.

Chapter 2 - Theoretical Framework

2.1 Introduction

For most organizations that are seeking to leverage their information technology competencies, IT-outsourcing has continued to appear as an attractive option [Choudhuri et al. 2009]. As a business strategy, outsourcing is a complex process, which involves more than simply transferring resources and functionalities. The general objective of outsourcing is to create value. Outsourcing works on the premise that there is [Choudhuri et al. 2009]: “a potential to reduce overall cost of ownership, take away the difficulties of running non-core IT functions, while introducing new, high value functionalities which will enable user efficiency and business agility” [Choudhuri et al. 2009]. The ability of an organization to outsource its IT structures and systems depends on various factors [Gottschalk and Solli-Sæther 2005]. These factors include for example the organization’s culture, its ability to manage client-provider relationships, security capabilities and people management.

A large number of outsourcing arrangements fail to secure the agreed deliverables, often resulting in a lose-lose situation for both the client organization and the service provider. It is estimated that the United Kingdom alone has wasted \$18 billion on failed information technology outsourcing projects [Choudhuri et al. 2009]. Information technology risk discussions go back at least 30 years. Hundreds of articles identify information technology related success factors or risk factors [Sherer & Alter 2004]. Numerous forms of risk and risk factors related to IT-systems and outsourcing projects, have been identified. Sherer and Alter [2004] define the IT-risk literature: “as a jungle of diverse risk models and partially overlapping, a-theoretical lists of risk factors and risk components”.

This chapter describes three theories (transaction cost economics, the resource based view and agency theory) to explain part of the behavior of outsourcing. Outsourcing projects can be divided into roughly three dimensions: *scope*, *criticality*, and *relationship* [Rinehart et al. 2007]. These dimensions will be discussed and determine the interpretation of the outsourcing project. Third, the characteristics and differences between IT-outsourcing and regular outsourcing will be described. Finally, the concept of risk and the process of risk management are discussed.

2.2 Outsourcing in general

The fast development of IT, the scarcity of well-trained experts and the complexity of information systems forces client organizations to obtain IT knowledge from external parties [Espino-Rodriguez & Padron-Robaina 2006]. Because IT is so important for many organizations, they must be sure that the provided IT-services and systems are reliable [Logan 2000; Solli-Saether & Gottschalk 2008]. As a result three strategic theories: transaction cost economics, the resource based view and agency theory have been used in this research to guide and explain the client organization and service provider behavior in IT-outsourcing relationships.

Over the past 3 decades, transaction cost economics (TCE) has emerged as a predominant theoretical explanation of outsourcing [Espino-Rodriguez & Padron-Robaina 2006]. TCE considers the asset specificity, uncertainty in the environment and the frequency of the transaction [Ojelanki et al., 1999]. In general, TCE is an economic theory concerned with the modeling and analysis of buyer and supplier relationships [Williamson 1976]. Client organizations may buy IT-services from the market, or develop them in-house. These decisions are based on the relative cost, which involve the costs of production and costs of the transaction [Solli-Saether & Gottschalk 2008]. It is difficult for client organizations in situations of imperfect information and uncertainty to evaluate the actions of the service provider [Kakabadse & Kakabadse 2003]. Client organizations are vulnerable to the risks of opportunistic bargaining and difficulties in the performance of the service provider [Ojelanki et al., 1999]. Transaction cost theory provides a set of principles for analyzing buyer and supplier transactions and determining the most efficient mode of structuring and managing those [Kakabadse & Kakabadse 2003]. The primary objective of IT-outsourcing is to minimize total cost (service and transaction costs) and maximize the total value to the client organization [Logan 2000; Solli-Saether & Gottschalk 2008]. It is relatively easy for client organizations to identify the costs of a set of IT-activities. The difficulty lies in defining the value of those activities for the client organization [Ojelanki et al., 1999]. Client organizations should realize that the costs of outsourcing are not just the costs of the provided service, but also include the costs of setting up relationships, monitoring and coordinating the activities. The total cost of IT-outsourcing can be broken down into [Ojelanki et al., 1999; Kakabadse & Kakabadse 2003]: (1) the costs of the provided service, which can be estimated from the market; (2) the set-up and contracting cost which include searching costs, negotiation fees, legal fees, other labor charges incurred to institutionalize the relationship; (3) the cost of monitoring and coordinating the activities of the service provider; (4) switching costs, that is, the cost to change from service provider in situations of under-performance or failure. If the decision to outsource is made, than it is the aim to reduce the transaction costs as much as possible [Wennink 2007].

Transaction cost economics has received a lot of empirical support in explaining outsourcing decisions [Espino-Rodriguez & Padron-Robaina 2006]. Therefore, outsourcing studies traditionally focused on economic approaches. However, the TCE ignores other aspects of organizational behavior that could

well have a large impact on outsourcing decisions [Logan 2000]. The Resource Based View (RBV) provides an approach that regards any organization as a set of resources and capabilities that are treated as the strengths that must be supported and that should guide the organization's strategy [Logan 2000]. The resources of an organization can be defined as any production factors that are available to the firm; in other words, those that the organization can control in a stable manner [Espino-Rodriguez & Padron-Robaina 2006]. Outsourcing influences the resources allocated to business units as well as the level of vertical specialization of the organizations activities [Quélin and Duhamel 2003]. In that respect, outsourcing modifies the organization's boundaries. Considering outsourcing decision as a strategic way, based on resources and capabilities, requires a deep understanding of the core competences [Logan 2000]. This understanding enables organizations to build their future competitive advantage. The RBV helps to distinguish the core competences and provides knowledge about which activities must be performed in-house and which must be outsourced. The possession of resources and capabilities determines what the organization should do itself, what it will obtain from external parties and what the possibilities are for innovation in the IT [Logan 2000].

Conflicts between the client organization and the service provider arise as they attempt to fulfill their individual needs [Ojelanki et al., 1999]. Both organizations fear the possible negative side effects of an unsuccessful outsourcing relationship. The key to success for the outsourcing participants is to resolve these inherent conflicts using principles from agency theory [Ojelanki et al., 1999; Logan 2000]. The agency cost theory expands on one aspect of the TCE and differentiates between outcome-based contracts and behavior-based contracts [Solli-Saether & Gottschalk 2008]. Agency theory is a well-known and used theory in the field of IT and outsourcing [Dibbern et al., 2004; Aubert, 2005; Bahli and Rivard, 2003]. Agency theory addresses relationships in which one party (the principal) delegates work to another (the agent) who performs the work according to a mutually agreed contract. Both organizations are self-interested with incongruent goals. This leads to two problems [Logan 2000]: (1) ex-ante, before signing the contract: the problem of adverse selection and (2) ex-post, after signing the contract: the problem of moral hazard. Adverse selection arises pre-contractually because the agent possesses private or hidden information about the real quality of his service and the principal is unable to find out that information [Juras 2008; Logan 2000]. Moral hazard arises post-contractually when the principal is unable to observe and verify the actions of the agent and may be faced with an agent engaged in hidden actions and not acting in the principal's interest [Logan 2000]. Problems also arise due to differences in risk preferences: goal conflicts among groups and information availability also affect the contract. The agent is more likely to behave in the interest of the principal when the contract is outcome-based and when the principal has more information about the activities of the agent [Solli-Saether & Gottschalk 2008].

In its application to IT-outsourcing, agency theory must help to answer two questions [Logan 2000]: (1) what can the user do to encourage quality service and fair treatment by the service provider?; and (2) what can the provider do to keep the user satisfied and at the same time reach its own goals? If these two questions can be answered simultaneously, the requisite atmosphere of trust can be developed to help initiate and sustain relationships [Dibbern et al., 2004; Aubert, 2005; Bahli and Rivard, 2003].

Outsourcing projects can be identified into roughly three dimensions [Rinehart et al. 2007]. The first dimension is the *scope*, which involves the degree of responsibility assigned to the service provider. The second dimension is the *criticality* of the outsourced task. Criticality is defined as the extent to which the outsourced activities in question impact the ability of the client organization to perform its core competencies. If the criticality of the outsourced function increases, so will the consequences of poor performance for the client organization. This means that the need for service provider management will also increase. The third dimension is the "*client organization-service provider relationship*", which results from the two previous dimensions [Rinehart et al. 2007].

The scope of outsourcing can be divided into four levels [Rinehart et al. 2007]: *Out-tasking*, *Co-managed Services*, *Managed services* and *Full Outsourcing*. These four levels are discussed below.

1. *Out-tasking*. In the simplest form of outsourcing the responsibility for the performance of a specific task is assigned to an outside service provider. Here only one aspect of the total function is assigned to an outside party, rather than responsibility for the entire function [Rinehart et al. 2007].

2. *Co-managed Services*. This type of arrangement involves assigning a larger scoped task or function to the service provider compared with the previous engagement, however, under direct client control. Here the client organization and service provider share responsibility for managing the tasks and assets and in many cases work collaboratively [Rinehart et al. 2007].

3. *Managed Services*. The responsibility assigned to the service provider is larger in scope than that of the previous engagements. Here the client organization typically engages the service provider to design, implement and manage an end-to-end solution of a complete function, such as the complete management of a client's transportation systems. The service provider is now responsible for all aspects of the function, including equipment, facilities, staffing, software, implementation, management and ongoing improvement [Rinehart et al. 2007].

4. *Full Outsourcing*. In this arrangement, the client organization assigns total responsibility to the service provider for the design, implementation, management and often the strategic direction of the function, operation, or process. The services are typically highly customized to the business environment of the client [Rinehart et al. 2007].

The second differentiating dimension for outsourcing arrangements is the criticality of the outsourced task or function [Rinehart et al. 2007]. There are two extremes (high and low) that indicate the criticality of the outsourcing project. Although the degree of criticality often corresponds to scope, this is not always the case. It is certainly possible to fully outsource a function or process with little critical importance, and it is possible to outsource one highly critical task as in the out-tasking engagement. However, such cases would be extremely rare and atypical. When tasks with low criticality are outsourced, the relationship between the client organization and service provider is primarily contractual and the client organization is focused on the transactional nature of the function outsourced [Rinehart et al. 2007]. As criticality increases, the relationship moves from being solely contractual to becoming more relational [Rinehart et al. 2007].

The third outsourcing dimension describes the differences in the relationship between the client organization and service provider [Rinehart et al. 2007]. Four types of relationships are identified (*Non-strategic transactions, Contractual relationships, Partnerships and Alliances*) which will be elaborated in more detail below.

1. *Non-strategic transactions*. This category encompasses the outsourcing of low criticality tasks with small or limited scope, resulting in outsourcing engagements that are solely transaction oriented, such as a simple commodity exchange [Rinehart et al. 2007].

2. *Contractual relationships*. Contractual relationships reflect the need for greater control over the provided services from the service provider [Rinehart et al. 2007]. The scope of the outsourced task is higher than with non-strategic transactions, though the function is still of low criticality to the organization. Moderate levels of communication frequency characterize this relationship, and unlike the case of the transactional relationship, dependence exists between the client organization and service provider [Rinehart et al. 2007].

3. *Partnerships*. This relationship type is characterized by the outsourcing of a critical task or function, albeit low in scope. The term “partnership” is used to connote strong and enduring trust between client organization and service provider, as well as a strong commitment to the relationship although the parties may not interact frequently [Rinehart et al. 2007].

4. *Alliances*. The most comprehensive outsourcing relationships occur when both criticality and scope of outsourced task are high. These arrangements are defined as alliance relationships, and reflect high interaction frequency, significant trust and commitment between client organization and service provider. Alliances presume a high level of confidence in the capabilities and integrity of the other party, and require significant resource investment in ongoing relationship management [Rinehart et al. 2007].

2.3 Information Technology Outsourcing

Over the last few years, there has been an increase in academic and business research on the perceived role of information technology (IT) and the role of IT on business performance [Gonzalez et al. 2005]. Primarily, this has been done by organizations which have recognized that they lack the necessary competence and capabilities to leverage their IT infrastructure [Maguire and Ojiako 2008]. IT plays an important role in the global economy and within organizations [de Vries 2003]. IT enables business transformation, supports re-design initiatives and gives organizations the opportunity to deliver flexible services in order to respond to changing customer demands [Maguire and Ojiako 2008]. This means that the ability of an organization to link its business goals and IT implementation is essential for the survival of majority of organizations [de Vries 2009; Maguire and Ojiako 2008]. IT functions of all sizes and in all industries face many new challenges in today's rapidly changing environment [Gottschalk & Karlsen 2005]. Trends like, the fast development of IT, the scarcity of well-trained experts and the complexity of realized information systems, require continual improvement of the IT-governance [Kakabadse & Kakabadse 2005; de Vries 2009]. Though IT-governance is quite an unspecified term it can be stated that it encompasses three main aspects: ownership, strategy, and control [de Vries 2009]. Ownership is important to know who is in charge of an information system and determines the functionality, technology, investment, maintenance and exploitation. Strategy implies the availability of objectives, strategic path and resources. Control is necessary to determine if activities are carried out according to the defined strategy, the budgets develop according to planning and the aimed organizational effects are realized [de Vries 2009]. The success rates of IT-projects are far from optimal. Almost 40% of the IT-projects were labeled as 'partly successful' while roughly 5% of the IT-projects were labeled as a complete failure [Ernst&Young 2009]. To improve these numbers, Ernst&Young [2009] identified in interviews several factors that should lead to an increase in the success of IT-projects: open and more realistic planning, perform a thorough risk analysis and make use of standard project management methodology.

IT-functions and tasks are typically organized as projects [Gottschalk & Karlsen 2005]. Projects are a flexible and efficient way of working, whether the goal is to design, install, reengineer or reorganize technology initiatives. IT-projects encompass five different life stages (*initiation, planning, realization, exploitation, and chain embedding*) [de Vries 2009]. Each of these stages have their own character and need special attention. Initiation is the start of an IT-project. It is the idea that IT might be useful solution to solve a problem. When it is agreed to work out such an idea the planning stage starts. In this stage content experts and technical experts create a functional design and a technical design. When consensus has been reached about these items the realization stage can start. During this stage technical experts create the designed functionality and technical solutions. After testing the results the implementation stage starts, followed by the exploitation and maintenance stage. During this stage, which can take many years, special attention has to be given to user aspects, technical aspects and organizational aspects [de Vries 2009]. Regular IT projects are performed within the internal IT department. The results of this type of project are typically used within the IT department or

the user organization. Examples of internal IT projects are feasibility studies, development projects, design projects, implementation projects, upgrade projects, migration projects and support services projects [Gottschalk & Karlsen 2005]. Changes in the business environment stimulate organizations to shift their focus from internal to external value creation [Jenster & Pedersen 2000].

The environment forces companies to rely on business partners to share knowledge and continually respond to change. An example of such a change is IT-outsourcing [Jenster & Pedersen 2000]. IT-outsourcing comes along with a lot of additional challenges, compared to regular IT-projects. For example, Gonzalez et al. [2006] state in their study that the main concern of IT-outsourcing is the excessive dependence on the provider. A second concern is the 'implementation' factor [Jenster & Pedersen 2000]. IT-outsourcing is an arrangement where a service provider takes over work from the client organization. In this perspective, systems and routines have to be implemented at the service providers premises [Gottschalk & Karlsen 2005]. Furthermore, the duration of an outsourcing project is longer than a regular IT-project. Outsourcing projects continue after the embedding and require mutual management in the operational phase.

Because of the strategic nature of IT, IT-outsourcing is a complex process, which involves more than simply transferring resources and functionalities. Lacity et al [1996] list five reasons why IT-outsourcing differs from 'regular' outsourcing and why IT cannot easily be handled over to a service provider:

- *IT is not homogeneous but comprises a wide variety of activities*

IT-outsourcing has become more complicated since IT cannot be isolated. The value of these systems can be found in the cross-functional integration of business processes. Also the lack of knowledge over the client organizations business processes that service-providers have, make IT-outsourcing more difficult [Lacity et al 1996].

- *IT capabilities continue to evolve at a dizzy pace*

A lot of organizations decided to outsource their IT systems because they thought the service-provider would arrange access to new technologies that they could not approach themselves. When the deal was closed, they usually signed for current technology with hazy references to future technologies. After a few years, they found out that the now outdated contracted technology was an obstruction for the adoption of new technologies [Lacity et al 1996].

- *There is no simple basis for gauging the economics of IT activity*

Rapid changes in technology make it difficult to estimate the costs of IT over a longer period of time. Many organizations feel lucky to sign a contract with a service-provider that offers a 25 percent cost reduction. This feeling often turns into dissatisfaction when the organization pays above-market prices after a few years [Lacity et al 1996].

- *Economic efficiency has more to do with IT practices than inherent economies of scale.* According to Lacity, most service-providers do not reach economical efficiencies by economies of scale, but by implementing better management practices. The fact that they could implement these management practices themselves should also be considered by organizations that have outsourcing aspirations [Lacity et al 1996].

- *There are large switching costs associated with IT sourcing decisions*

It is for client organizations more difficult to switch from IT-service provider than from for example a transport service provider. IT-investments are usually very high. When it is decided to switch from service-provider, these investments are lost. Due to the costs involved, switching service providers in an IT environment is a complicated decision [Lacity et al 1996].

Although outsourcing did not become a dominant trend until the 1990s, it was not an entirely new phenomenon [Szabo 1995]. For example, IT development projects have been relying on outside sources since the 1980s. The development of the Internet was the prerequisite condition, mediator and motivator of outsourcing-transactions all over the world. Organizations are increasingly relocating functions to countries such as India, South Africa, the Philippines and Singapore, where IT knowledge is cheap and plentiful [Szabo 1995]. Beulen [2002] distinguishes four phases in the development of the Dutch IT outsourcing market, namely *Autarky*, *Chaos*, *Governance*, and *Competition*. These phases will be discussed to put in a perspective which path IT-outsourcing did travel to arrive at the point where it is today.

Autarky

Until the mid seventies, IT services were mainly performed by the internal IT department. In this *Autarky* phase organizations had their own computing power and developed their own applications. Large central mainframe-based departments arose that fulfilled the internal information necessities. No Service Level Agreements (SLA's) were concluded between the business and the internal IT-department. These organizations usually had a central budget for IT services and the costs were charged to the business units by a formula. Because of the lack of SLA's, the automation department only had an effort obligation. This obviously did not contribute to the quality level of the service.

Chaos

Capacity reasons caused the shift to the next *Chaos phase*. In the mid seventies, a capacity shortage of qualified IT personnel came into existence. Moreover, a technological event occurred. Mainframe computers were slowly replaced by distributed architecture. This shortage of personnel was set off by hiring external personnel. This led to an evolvement for the IT department, now they also had a purchasing function and responsibility for the project. During this era, the contracting of external

personnel keeps expanding. On top of that, external IT vendors are not only delivering extra capacity, they also start to execute entire projects on their own. Along with the rapid technological developments, this affects the internal IT department's state of control. This lack of control initiates the next *Governance* phase.

Governance

In the nineties, the number of vendors that deliver IT services had been reduced and the length of the related IT contracts had been extended. This development, forced by business management, was meant to increase control of costs and the predictability of the results. The long-term contracts with one or a few vendors changed the position of the internal department.

Competition

In the fourth *Competition* phase, the information management sector slowly matured and the number of vendors that deliver IT services expanded again. The increase of vendors led to competition, which forced them to decrease their prices and improve their service levels. The scope and criticality of IT outsourcing projects also increased. The delivered services did not only contain secondary processes, but also primary processes can be outsourced.

Generally it is thought that the most important factors and constraints, regarding IT, are technology and money [de Vries 2009]. Technical and financial problems may happen, but they can be solved. IT is by definition a technical issue. The successful development, implementation and exploitation of IT-facilities however have much more aspects than only technical ones. Also social, economic, organizational and managerial aspects play an important role. The IT knowledge of the general management is an important factor that influences the success of IT-projects. If the user organization does not know how to formulate its information needs, does not have any idea of IT-solutions or cannot maintain installed IT-facilities, it is very difficult to successfully create, use and operate IT-facilities [de Vries 2009]. As projects grow in importance and complexity, the necessity to perform risk management increases [Adeleye et al. 2004]. During the realization many threats and risk factors could negatively impact the project. The management of the organization could reduce and control these threats and risk factors by performing risk management [Overbeek, Roos en Spuit 2000; Buren 2000: in Eli 2003]. A risk analysis enables an organization to design and implement measures against the risk factors.

2.4 Risk and Risk Management

Risk and risk management have been studied in a variety of domains, such as Insurance, Economics, Management, Operations Research and Engineering [Aubert et al. 2005]. Each field addresses risk in a fashion relevant to its object of analysis, hence, adopts a particular perspective. In this thesis risk is equated to a possible negative event based on Levin and Scheinder [1997]. They define risks as: *“events that, if they occur, represent a material threat to an entity’s fortune”*. Using this definition, risks are the multiple undesirable events that may occur. Applied in a management context, the “entity” would be the organization. Given this perspective, risks can be managed using contingency planning, thus providing a path to follow if an undesirable event occurs. Dealing with risk means arbitrating between risks and returns [Covello & Mumpower]. For a given rate of return, managers will prefer lower volatility but would be likely to tolerate higher volatility if the expected return was thought to be superior. Another important distinction in risk analysis is the notion of endogenous versus exogenous risks [Covello & Mumpower]. Exogenous risks are risks over which organizations have no control and which are not affected by their actions [Aubert et al. 2005]. Earthquakes or hurricanes are examples of exogenous risks. Although organizations have some control over the extent of damage by selecting construction standards, they have no control over the occurrence of such natural events. Endogenous risks, on the other hand, are risks that are dependent on organizational actions [Aubert et al. 2005].

Risk management tries to battle and prevent all dimensions of the risk construct: the likelihood of occurrence of a particular event or outcome, the consequences of that particular event or outcome and the causal pathway leading to the event, by (1) analyzing the sources, (2) seeking to understand the forces that may drive particular risk factors and (3) how these might be managed to improve the chances of positive outcomes in terms of performance and avoid negative consequences [Ritchie & Brindley 2007]. De Vries [2003] defines risk management as: *“Risk management contains the systematic analysis of factors that could preclude effective and efficient IT-facilities, determining the consequences of these factors and their effects on the organization and taking actions to prevent these factors from happening, or did they actually manifest, decrease their effect. This increases the chance of successful realization IT-facilities.”*

Kleyn [1994] states that prior to the actual research a preparation phase should take place. The goal of this preparation phase is to obtain clarity in a number of important aspects of the research, like the motivation, objectives, scope, method of research, available time and money and starting material. After this preparation phase the risk management research can start. Kleyn divides risk management research into 3 phases [Kleyn 1994]: (1) analysis, (2) design and selection of control mechanisms and (3) the implementation of the control mechanisms. The analysis phase contains the identification and the systematic mapping of risks and threats. The second phase designs and selects control mechanisms for non-responsible risk factors. The implementation of control mechanisms contains applying the selected measures and periodically controlling the effectively and efficiency.

Raz & Michael [2001] state that risk management is a coherent process that can be separated into five phases: (1) risk identification, (2) risk estimation, (3) risk evaluation, (4) risk reduction and (5) risk monitoring and control. Risk identification contains the execution of an error- and incident analysis. Risk estimation contains the execution of a quantitative analysis and extrapolations. During the risk evaluation the set risk factors will be judged and is determined which risk factors are acceptable [Raz & Michael 2001]. Furthermore, the economical consequences of the risk factors will be examined. The implementation contains the development of strategy, inspecting policy options and taking the implementation decisions. The risk monitoring and control phase monitors the risk-environment, performs audits and generates new risk information [Raz & Michael 2001].

The literature related to IT risk mentions many risk factors that could apply in different types of situations [Sherer and Alter 2004]. Matthijsse [2000] makes the distinction between several fields of risk including: political, strategic, financial, governmental, organizational, laws and regulations, business processes, data applications and social. It is a recognized problem that many of the risk factors overlap, as is illustrated in figure 1.

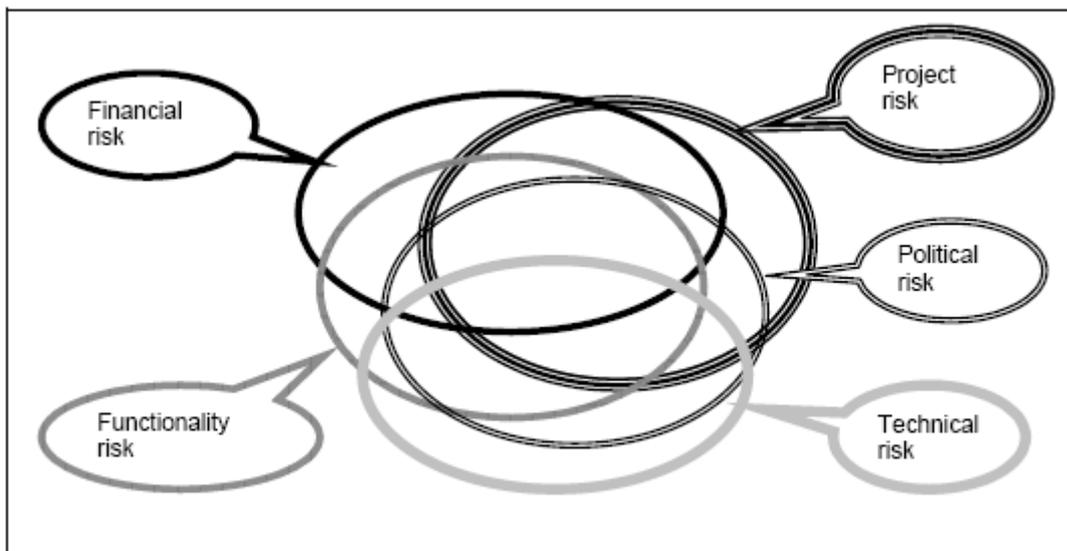


Figure 1: High degree of overlap among risk factors [Sherer and Alter 2004]

Describing risk factors helps to organize risks through categories that cluster things that could go wrong. However, figure 1 illustrates that typical risk components mentioned in the IT literature overlap substantially and therefore are not independent. For example, technical risk in a project is part of the overall project risk and contributes directly to both functionality risk and financial risk [Sherer and Alter 2004].

2.5 Summary

The environment forces organizations to rely on business partners to share knowledge and continually respond to changes in information technology. Three theories (transactions cost economics, the resource based view and agency theory) have been used to explain the observed behavior in outsourcing. None of these theories explain all the behavior observed, but they do help to predict the likely success of some outsourcing arrangements. Outsourcing projects can be divided in three dimensions. The first dimension is the *scope*, which involves the degree of responsibility assigned to the service provider. The second dimension is the *criticality* of the outsourced task. Criticality is defined as the extent to which the outsourced activities in question impact the ability of the client organization to perform its core competencies. The third dimension outsourcing describes the differences in the client organization-service provider relationship. Outsourcing comes along with a lot of challenges compared to a regular IT-project, like the dependence on the service provider and the required transformation to the new delivery model. The successful development and implementation of IT-outsourcing activities involves more than only technical aspects. Also social, economic, organizational and managerial aspects play an important role. IT-outsourcing literature mentions many risk factors that could apply in different types of situations. Risk factors are defined as: *“events that, if they occur, represent a material threat to an entity’s fortune”*. The distinction is made between several fields of risk, like political, strategic, financial, governmental, organizational, laws and regulations, business processes and data applications.

Chapter 3- IT-Outsourcing

3.1 Introduction

When Eastman Kodak announced that it was outsourcing its information technology systems in 1989 to IBM, DEC and Businessland, it created quite a stir in the information technology industry [Dibbern et al. 2004]. Never before had such a well-known organization, where IT was considered to be a strategic asset, turned it over to third party providers. Since that moment both large and small organizations have found it acceptable, indeed fashionable, to transfer their IT assets, leases and staff to outsourcing service providers [Dibbern et al. 2004]. Senior executives at well known organizations in the U.S. and abroad have followed Kodak's example and signed long term contracts worth hundreds of millions of dollars with outsourcing service providers. Today, client organizations increasingly employ Information Technology (IT) outsourcing to support strategic IT decisions. As the pace of outsourcing has continued to accelerate, so has interest in the topic on the part of researchers, practitioners, and policy makers. Despite this increasing interest, there remains a great deal of uncertainty surrounding the outsourcing phenomenon [Rasheed & Gilley 2005]. Is it good for an organization to outsource its activities? How does it affect profitability in the short term and long term? What are the implications for the organizations competitiveness? When should an organization outsource and when should it avoid outsourcing? It is important to have some understanding of what constitutes outsourcing [Rasheed & Gilley 2005]. There are many reasons why organizations engage in outsourcing. Cost advantages often provide the initial motivation for outsourcing, especially offshore outsourcing. Apart from obtaining components at a lower price, outsourcing also helps organizations to lower their break-even point by reducing the fixed costs. A second advantage of outsourcing that is increasingly being mentioned in the literature is that it can lead to a heightened focus on core competencies (Quinn, 1992) [Rasheed & Gilley 2005].

This chapter describes and illustrates the process of outsourcing, which consists of five phases. This chapter furthermore explains the differences between *Onsite outsourcing*, *Onshore outsourcing*, *Near-shore outsourcing* and *Offshore outsourcing*. Accordingly the two main models for outsourcing relationships are discussed and illustrated: single-vendor and multi-vendor outsourcing. To get an understanding what constitutes outsourcing, IT-outsourcing motives are discussed. These motives are divided in strategic, tactical and operational motives. Finally, the framework of Lacity [1996] is discussed. This framework selects the right activities to outsource.

3.2 The outsourcing process

IT-outsourcing projects can be divided into five phases [Derksen & Noordam 2009; Fleming & Low 2007]: the decision to outsource, the selection of the service provider, the transition, the delivery and contract termination. The outsourcing literature discusses several outsourcing models, but the foundation of the outsourcing trajectory is captured in these five phases. The five phases are shown in figure 2 below.

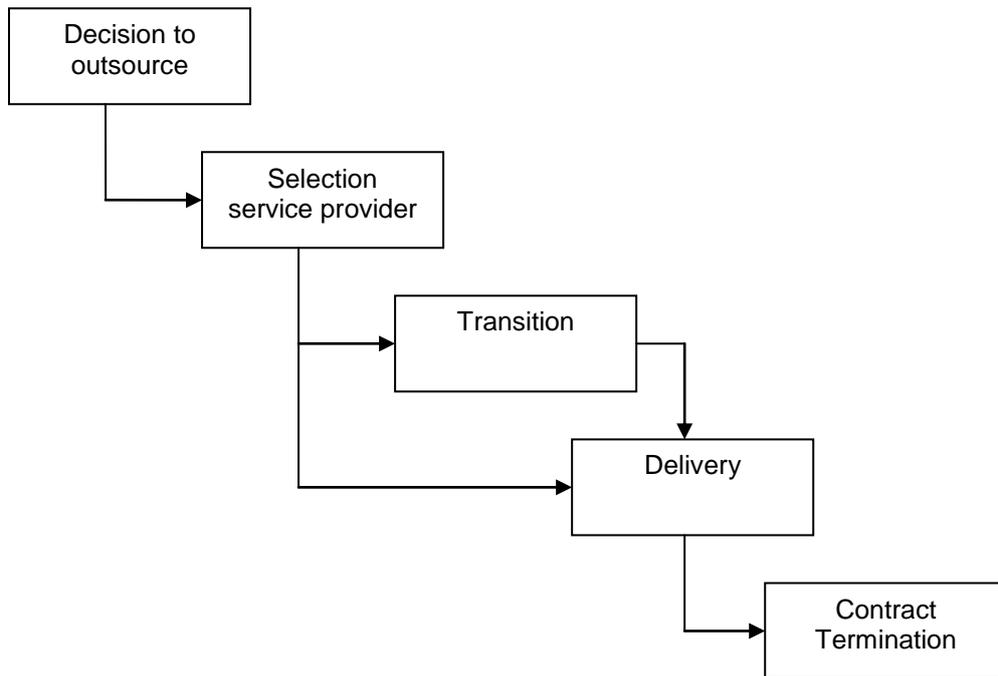


Figure 2: Five phases in IT-outsourcing [Platform outsourcing Nederland 2003].

A great part of the outsourcing success is determined in the decision phase [Fleming & Low 2007]. In this phase, the client organization should carefully think why it wants to outsource and what activities it wants to outsource. The organizational objective that is being pursued should be written down into a business case. The business case helps to maintain control over time and checks the status of the set objectives. An important element of the business case is the investment analysis [Derksen & Noordam 2009]. The decision to outsource should be supported with financial data. This financial data helps to determine the degree of reality and the feasibility of the intended cost savings [Derksen & Noordam 2009]. The following organizational costs should be identified [Derksen & Noordam 2009]: personnel costs, contractual costs, depreciations, costs for third parties and overhead costs. These costs should

be compared to the outsourcing costs and benefits. Furthermore, the decision phase should include an inventory [Fleming & Low 2007]. A proper analysis of the current and desired situation creates a steady foundation. The client organization should identify which employees and what activities will be touched by the outsourcing decision. Accordingly, the client organization should identify the current and desired state of the employees and means. The client organization should determine a risk profile during the inventory. The end of an outsourcing trajectory is the contract termination. The client organization should already in the decision phase think about the post-outsourcing-period, in which the contract could be extended or will be terminated [Fleming & Low 2007].

The second phase is the selection of the service provider. Empirical research from Derksen & Noordam [2009] shows that the costs of this phase are on average 1-2% of the total contractual value. The selection of a service provider in outsourcing is comparable to the strategic supplier selection in logistics or marketing management. The client organization selects the service provider on the basis of two elements: 'an objective comparison between the different tenders of potential service providers and a 'feeling' element [Fleming & Low 2007]. The 'feeling' element is almost just as important as the tender comparison. The feeling element helps to create a proper relationship. The comparison of the tenders usually involves a series of iterations [Derksen & Noordam 2009]. It is the goal of these iteration steps to reduce the number of possible service providers to one. The first step in the iteration is the Request for Information (RfI) [Derksen & Noordam 2009]. It is the goal of this phase to create a shortlist of potential service providers. This step is a useful test for the client organization to check whether the market understands their outsourcing business case. The next step is the Request for Proposal (RfP), also known as the tender request [Derksen & Noordam 2009]. The final step is the negotiation where the so called BAFO (Best and Final Offer) is being presented [Derksen & Noordam 2009]. These phases are concluded when the client organization signs the outsourcing contract.

The third phase is the transition. The transition phase consists according Derksen & Noordam [2009] of a transfer and a transformation. Empirical research from Derksen & Noordam [2009] shows that the costs of the transition phase are on average 2% of the total contractual value. Once the client organization selects a service provider and agrees to the contractual terms, the transfer can take place start. To create a proper transfer strategy, a number of characteristics should be mapped [Derksen & Noordam 2009]. The first characteristic is the situation analysis, which examines the complexity and uncertainty. The situation analysis forms the basis for risk analysis. It is the goal of this risk analysis to study project risks, transition risks and business risks. When both the situational analysis and risk analysis have been performed, a transformation strategy can be developed. The transfer usually takes one to three months, while the transformation takes eight to twelve months [Derksen & Noordam 2009].

In the delivery phase all previous collected information and analyses are combined and should lead to a controlled execution of the developed strategy and service [Derksen & Noordam 2009]. There will be no problems when everything goes according to plan. However, reality shows that every project faces problems and each multi annual service commitment is confronted with poor service delivery and changes in the environment, demand and conditions. A number of success factors have a positive influence on the delivery phase. There should be a professional formality in the relationship. Both organizations should stay focused during this phase. Furthermore, both organizations should make clear and measurable agreements. The organization should use the collected data in the previous phases, but still should implement room to maneuver because all IT-outsourcing projects are subject to change. A proper way to monitor the services is performing a periodical customer satisfaction test. The outcomes of this test can be turned into input to adjust the provided service.

Termination and exit management is a critical part of an outsourcing project and must not be overlooked [Hunton & Williams 2008]. Both parties, especially the client organization, should therefore give thought to the circumstances in which the outsourcing project can be brought to an end. Well before the end of the contract, the organizations need to develop a detailed exit strategy. This is a complex task and will require the cooperation of all of the involved organizations to ensure the risk of service disruption does not materialize [Hunton & Williams 2008]. There are several alternatives after the contract has been expired [Derksen & Noordam 2009]. The easiest alternative is to extend the contract. In this alternative, the client organization is satisfied with the provided service and relationship and chooses to continue to work with the same service provider. In general, this alternative has a low number of risks and there is no discontinuity. The second alternative is back-sourcing. In this alternative, the client organization chooses to execute the formerly outsourced service back in-house. This means that the client organization has to run through another transition trajectory again [Hunton & Williams 2008]. All people, means and processes have to be reorganized in such a way that the service can be performed again in-house. The third alternative is follow-up sourcing. In this alternative, the client organization chooses to work together with a different service provider. The services will be transferred from service provider A to service provider B. The cooperation of service provider A is crucial to realize follow-up sourcing, this issue should be managed in the decision phase. The final alternative is the so called 'dying system'. This means that the service will be phased out and that the service will not be continued at all. It is most likely in this alternative, that other services will replace the old one [Hunton & Williams 2008]. Examples are the creation of new platforms and new applications

3.3 IT-outsourcing motives

A lot of research has been conducted concerning the motives and advantages of IT-outsourcing [E.g., Szabo 1995; Harland et al. 2005; Palm 2001; Chou & Chou 2009]. The different motives and advantages of IT-outsourcing have been divided into three groups: *Strategic*, *Tactical* and *Operational*.

Strategic Motives

Outsourcing enables client organizations to focus on their core business [Ghoderswar & Vaidyanathan 2008]. Chou & Chou [2009] identified the benefits of concentrating an operation on a small, manageable, number of tasks at which the operation becomes excellent. While focusing on fewer, manageable core activities, organizations could lessen the costs and complexity of their own operations. It can often be seen that when client organizations tend to focus on their strategic issues, the managers spend their time more effectively [Adams & Baker 2008]. The second strategic motive to outsource is related to innovation. Client organizations can acquire better access to technical and business specific knowledge through the service provider [Weigelt 2009]. Client organizations can gain access to highly specialized, sophisticated services without having to add to the payroll or be obligated to use the specialist for a long time. Most client organizations are simply unable to keep pace with technologies that change from day to day [Weigelt 2009]. When business management has lost faith in the IT department, they can eliminate them by outsourcing these IT activities. Through sourcing alternatives, high-quality standards will be applied to the existing staff [Ghoderswar & Vaidyanathan 2008]. Furthermore, the service-provider can show a better insight into the added value of the IT function, when the internal IT department is not able to provide this information [Koh et al. 1999]. Besides, the use of outsourcing may facilitate the development of economies of scope through product diversification. Next, the objectivity of the service provider relieves the client organization of the constraints of cultures, established attitudes and taboos, providing fresh ideas and creativity for new opportunities [Koh et al. 1999]. IT-outsourcing enables the client organization to standardize its IT infrastructure and simplify processes. Other motives to outsource are less obvious. Kerr and Radford [1994] claim that outsourcing helped to undermine the power of trade unions dominating the UK public sector workforce. Greaver [1999] highlighted the potential benefits of improving credibility and image by associating with superior providers. A final motive to consider outsourcing is the so-called 'bandwagon' effect. Organizations want to outsource just because other organizations outsourced their IT functions too. They try to imitate others, which is a rather irrational motive.

Tactical Motives:

Cost reductions are the most dominant motives behind outsourcing. Achieving lower costs while maintaining or improving other standards, requires service providers with excellent supply chain performance [Coppa 2008]. The costs can be decreased by using the efficiency of large IT service providers. They can often apply bulk-purchasing and rationalize the processes. Outsourcing offers also cost-cutting solutions in relation to employment. The most significant savings are realized on the secondary expenses of “inside employment”. The high costs of payrolls and payroll taxes, health-care and other expenses associated with full-time workers, make it more interesting for organizations to get the work done through outside sources [Harland et al 2005]. Furthermore, IT-outsourcing increases the control for the client organization. IT-outsourcing gives the client organization a better anticipation of the costs, because it visualizes hidden costs [Juras 2008]. Besides, the client organization can transfer several risks over to the service-provider. Future unexpected costs like fast technology obsolescence are now handled by the service provider. A tactical and economical motive to outsource is to increase venture capital [Bensgir & Tekneci 2008]. Outsourcing provides the client organization with an opportunity to liquefy the organization's tangible and intangible IT assets, by selling the resources to the service-provider and leasing them back. Furthermore, the balance sheet can be improved. Outsourcing can free up assets and reduce costs in the immediate financial period. Client organizations who outsource parts of their in-house operations report significant savings on operational and capital costs [Harland et al 2005].

Operational Motives:

Through outsourcing it is possible to achieve higher service levels, which the client organization could not achieve on its own before. The client organization could demand higher service levels than the internal IT department could deliver. Furthermore, IT-outsourcing could improve the flexibility and capacity. When a certain service is outsourced, the organization can react fast on changes or demanded IT. Harland et al [2005] suggests that outsourcing improves flexibility to meet changing business conditions, demand for products, services and technologies by creating smaller and more flexible workforces [Greaver 1999]. The final operational motive is migration. When client organizations are migrating to new hardware or software platforms, they often outsource their old platforms. In this way, the service provider manages and operates these systems until the migration is complete and the new systems proved reliable [Gardner 2004].

3.4 IT-outsourcing activities

Lacity [1996] developed a framework for selecting the right activities to outsource. Outsourcing several IT activities and keeping others in-house requires treating IT as a portfolio [Komporozos-Athanasidou 2007]. IT activities should be analyzed on the basis of their contribution [Lacity 1996]. Lacity's framework enables each organization to analyze the delineation of its IT activities for its business context. The framework consists of two dimensions: *Contribution of IT activity to Business Operations* and *Contribution of IT activity to Business Positioning*. The framework is presented in figure 3.

Contribution of IT Activity to Business Operations	Critical	Best Source	In-House
	Useful	Outsource	Eliminate or Migrate
		Commodity	Differentiator

Contribution of IT Activity to Business Positioning

Figure 3: Framework to select activities to outsource [Lacity 1996]

The first dimension contains the contribution of the IT activity to business operations. This can either be a critical contribution or a useful one. For instance, a nuclear power plant will find their security monitor system critical, while the employee planning system for managers will be considered as useful. The second dimension is the contribution of the IT activity to the business positioning. An IT activity can differentiate an organization from its competition [Lacity 1996]. Although some IT activities are considered commodities, it does not entail they should not be executed competently. Critical commodities are significant for performing normal business operations, but they don't differentiate in competition. Operations that both differentiate and are critical for business should be remained in-house. A well-run client organization understands its core capabilities and how those capabilities help to create value [Dawson 2000]. Organizations should also understand the relationship between core competencies and other related activities that provide no direct competitive advantage, but are highly interdependent with those that do. An organization should carefully consider outsourcing any function that may provide a competitive advantage in the future [Autry et al. 2007]. The decision to enter into

an outsourcing engagement should include an extensive evaluation of the client organizations' own capabilities versus that of the service provider [Blumberg 1998]. Client organizations can benefit from outsourcing when they tap into the talent and unique capabilities of the service provider [Autry et al. 2007]. As the scope of the task outsourced to the service provider increases, the ability to retain control of the task or function decreases. In a bad scenario, potential competitive advantages may be damaged, endangering business success and survival [Blyth 2008]. Interdependence refers to the interconnections between tasks, business units or functions [Bahli & Rivard 2005]. In IT- outsourcing, two types of relatedness are identified. First, an outsourced IT operation may have a direct (or indirect) link to another IT operation that is kept in-house. Second, an outsourced IT operation may have a direct (or indirect) link to another outsourced IT operation. When IT operations are interdependent, the outsourcing of one may subtly weaken the ability of the other to successfully perform [Bahli & Rivard 2005]. For instance, interfaces between systems provided by the service provider and those managed in-house can be difficult and complex to build, maintain and operate. Hence, the client's ability to deliver its own products to its customers depends upon the service providers' delivery of required data processing.

Client organizations have the option to outsource their IT within their own country or to foreign countries. The literature mentions the following outsourcing alternatives [Derksen & Noordam 2009]: *Onsite outsourcing*, *Onshore outsourcing*, *Near-shore outsourcing* and *Offshore outsourcing*. With Onsite outsourcing, the employees work in the same country as the client organization, mostly on the same location [Derksen & Noordam 2009]. The employees are being added as externals to the current processes. Onsite outsourcing was the dominant outsourcing strategy till the year 2000. The advantages of this strategy are that the employees have direct contact with each other and experiences less cultural or communication problems (in relation to offshore outsourcing). The disadvantage is that the client organization faces extra housing costs. With onshore outsourcing, the externals are also being employed in the same country as the client organization. However, they do not work on the same location, but on several locations through out the country.

With Near-shore outsourcing, the services are provided from countries near the location of the client organization (within Europe) [Derksen & Noordam 2009]. Examples for Dutch organizations are countries like Romania and Poland. The advantages of Near-shore outsourcing are that the cultural differences are still relatively small and the client organization does not have to pay for housing. With offshore outsourcing, the services are being delivered from countries like India and Singapore. The low labor costs are the main motive to choose for near-shore and off-shoring [Rottman & Lacity 2008]. Disadvantages of off-shoring are the cultural differences. Although the disadvantages, off-shoring is the dominant outsourcing strategy since the year 2000 [Rottman & Lacity 2008; Derksen & Noordam 2009].

The size of the client organization affects the availability of resources and therefore the outsourcing strategy [Rohde 2004]. Factors that differentiate large organizations from small and medium organizations are: the complexity of the organization and the related IT systems, power in contract negotiations and the capabilities to manage contractual relationships.

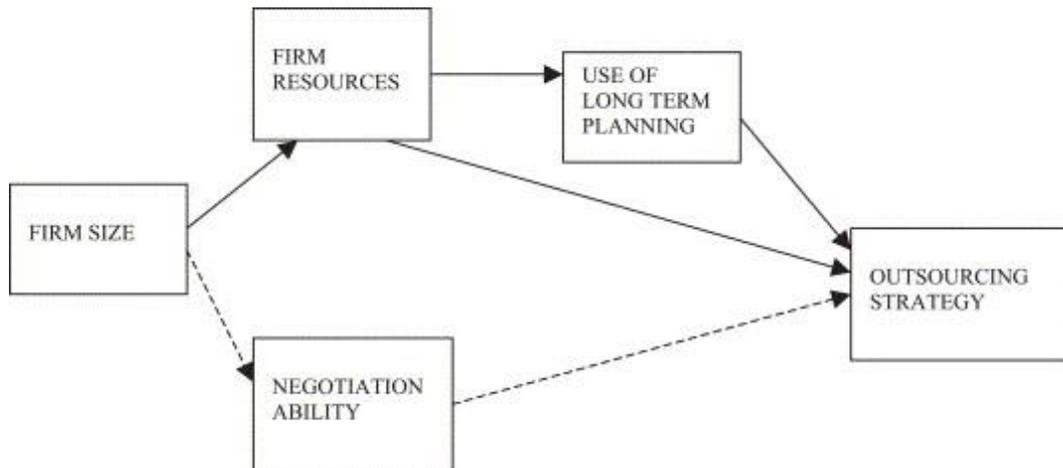


Figure 4: Relationship between firm size and other factors affecting outsourcing strategy [Rohde 2004]

By their very nature, small organizations are less complicated than large organizations [Rohde 2004]. Because they are less complicated, many of their IT-related issues are typically less complex than those of large organizations [Rohde 2004]. This lower complexity means that the smaller organizations can more easily differentiate between those IT functions that are commodity versus strategic [Rohde 2004]. Small organizations are less likely to have the same level of IT skills within their organizations and, hence, have a greater probability of requiring the services of outsourcing service providers. Many of their IT-related functions are outsourced through necessity. The outsourcing decisions of smaller organizations are made on an ad hoc basis rather than as part of a longer term strategic plan. The relationship between the size of an organization, resources, planning, and outsourcing strategy is illustrated in figure 4.

Client organizations have to make a decision about the type of arrangement with the service provider. They can opt for a standard service provider agreement or a negotiated contract [Ngwenyama & Sullivan 2007; Rohde 2004]. The size of the client organization can affect the type of arrangement because of the differences in negotiation power and the ability to manage contractual relationships.

For larger organizations and longer period contracts, the success of the arrangement often relies on the skill by which the contract is negotiated. The power and skills of small organizations to negotiate small contracts with a large outsourcing provider is limited [Bernstein 2000]. The power and skill to manage the relationship with a large outsourcing provider is also limited. Poor outsourcing outcomes often arise when organizations fail to make outsourcing contracts flexible enough to adjust to changes in the business and technology [Bernstein 2000]. Smaller organizations lack the negotiation power and ability to incorporate this flexibility into arrangements. The issues of IT functional complexity may also play a role in the terms of the contractual arrangement. The decreased complexity of the IT functions is also likely to result in straightforward contracting. Furthermore, the process of contract negotiation is costly and requires expert legal advice. These costs are prohibitive for small organizations.

IT-outsourcing service providers vary from small local companies to big multinationals. Both organizations have advantages and disadvantages. Small local service providers do usually have a lot of knowledge about the client organization [Derksen & Noordam 2009]. They are furthermore somewhat dependent on the client organization. The client organization forms an important share of their total turnover. Large multinational service providers are less dependent on one client organization. Large multinational service providers can offer client organizations scale advantages. This is particularly interesting for client organizations that are willing to decrease their costs. The small local company is in general more involved with his clients and builds their relationship mainly on trust and cooperation [Derksen & Noordam 2009].

There are mainly two models that describe outsourcing relationships [Vaughan et al. 2005; Verkooijen & Dingemans 2009]: single-vendor and multi vendor relationships. Factors that influence the choice for single or multi vendor outsourcing are [Verkooijen & Dingemans 2009; Bernstein 2000]:

- 1) The client organizations' preferred methods for management and control of the service provider
- 2) The maturity of the client organization
- 3) The degree to what extent the client organization wants to remain independent
- 4) The related costs to monitoring
- 5) The available number of service providers.

The most common outsourcing relationship model is the single vendor approach [Ojelanki et al., 1999]. The strength of single vendor outsourcing is the administrative simplicity of managing only one service provider. Single vendor outsourcing requires a proper alignment between the two organizations and a clear distribution of the responsibilities [Verkooijen & Dingemans 2009]. In the single vendor outsourcing strategy, the client organization develops a strong relationship with one service provider. Although the single vendor strategy leaves an organization open to opportunistic bargaining and performance failure vulnerability, some have argued that it can be effective in some situations. Figure 5 shows a single-vendor outsourcing relationship.

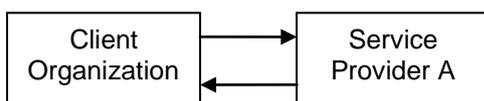


Figure 5: Single-vendor outsourcing

Ojelanki et al., [1999] suggest that developing a highly integrated long term relationship with a single vendor can considerably reduce cost and improve quality. It is understandable that service providers do not have all the competencies to deliver all possible IT services. To battle this 'problem', the prime service provider could create back-to-back service contracts with other service providers [Ojelanki et al., 1999].

Single service providers need to contract specialist resources to fill skills gaps or to fill intermittent resource requirements [Bernstein 2000]. In this scenario the service provider will act as a service broker. The service broker buys services and applications from other service providers and offers these solutions to the client organization. Figure 4 shows a service broker outsourcing relationship

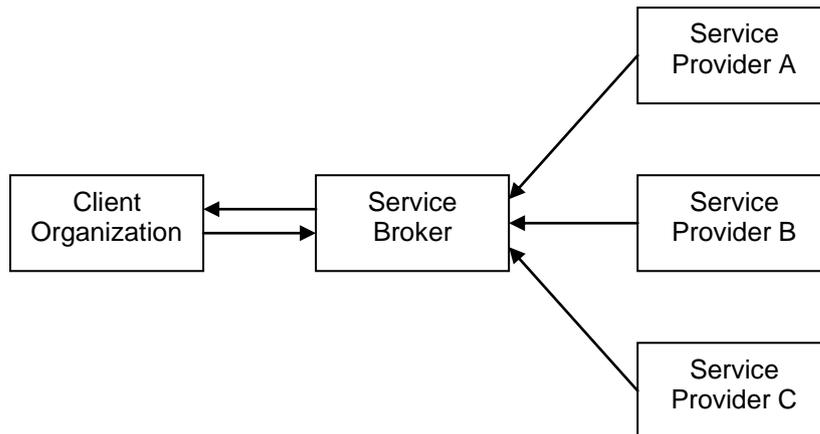


Figure 6: Service broker outsourcing

Ojelanki et al. [1999] state that poor vendor performance is the result of poor communication and coordination. The client organization may receive services from different service providers, but has only contact with the service broker. The service broker has to monitor and coordinate the activities of the other service providers. Because the client organization has only contact with the service broker, it minimizes performance assurance costs and therefore total cost.

A multi-vendor relationship is the most appropriate model for the majority of organizations [Vaughan et al. 2005]. This model works well for many organizations because the client organization retains the specialist knowledge of its business and the translation of requirements to IT services. This allows the business to have maximum flexibility to change and adopt sourcing strategies according to changes in the business environment and the IT market place. The switching cost from one provider to another is significantly lowered and provider complacency is reduced. [Vaughan et al. 2005]

Managing multiple service providers requires other capabilities than managing only one service provider. The service providers are all responsible for their own activities. This requires close coordination. The client organization must be sure that the activities of service provider A connect to the activities of service provider B [Verkooijen & Dingemans 2009]. Especially large organizations work together with multiple service providers. Figure 4 shows a multi-vendor outsourcing relationship.

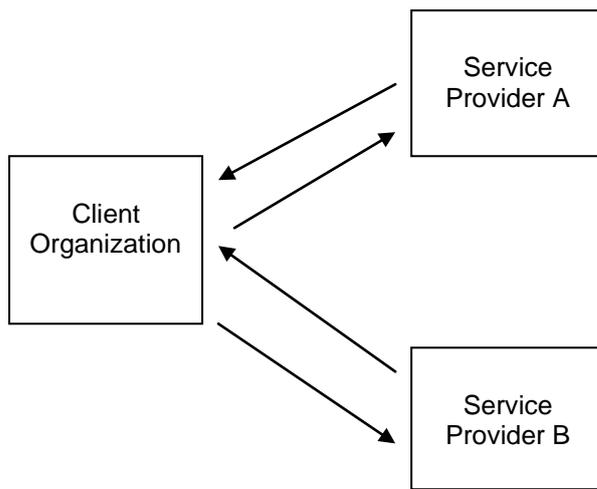


Figure 7: Multi-vendor outsourcing

The multiple vendor strategy can be traced to Porter's recommendation [1985] on using several competing service providers to insure low cost, high performance and quality [Ojelanki et al., 1999]. Porter suggests that a client organization can increase his bargaining power by contracting with a number of service providers who are in competition with each other. The argument posits that the ever present threat of losing business to each other will induce each service provider to provide a higher level of performance and quality than it otherwise would.

3.5 Summary

IT-outsourcing projects can be divided into five phases [Derksen & Noordam 2009]: the decision to outsource, the selection of the service provider, the transition, the delivery and contract termination. The client organization should carefully think why it wants to outsource and what activities it wants to outsource. The client organization selects the service provider on the basis of two elements: 'an objective comparison between the different service providers' and 'feeling'. Termination and exit management is a critical part of an outsourcing project and must not be overlooked. The different motives and advantages of IT- outsourcing have been divided into three groups: *Strategic*, *Tactical* and *Operational*. Lacity [1996] developed a framework for selecting the right activities to outsource. Outsourcing several IT activities and keeping others in-house requires treating IT as a portfolio. IT-outsourcing service providers vary from small local companies to big multinationals. Both organizations have advantages and disadvantages. Client organizations have the option to outsource their IT within their own country or to foreign countries. There are mainly two models for outsourcing relationships [Vaughan et al. 2005; Verkooijen & Dingemans 2009]: single-vendor and multi vendor relationships. Managing multiple service providers requires other capabilities than managing only one service provider.

Chapter 4- IT-outsourcing risks and management

4.1 Introduction

Outsourcing strategies are often considered the “silver” bullet to resolve the problems in many organizations [Rasheed & Gilley 2005]. Outsourcing has been touted as the ideal way for organizations to reduce costs, focus on core business processes, improve services, enhance skills and increase overall competitive advantage. However, IT-outsourcing comes not without risk and requires careful planning and control to ensure that projects run smoothly and fulfill the requirements set. Regular IT-projects face risk factors like the use of an inappropriate methodology, lack of customer involvement, lack of formal management practices, dissimilarity to previous projects and project complexity [Harland et al 2005]. Most of these risks also apply to IT-outsourcing projects, but recent research suggests that there are some unique risks for client organizations, arising from possible difficulties in controlling the service providers’ activities and maintaining the working relationships [Taylor 2006]. Organizations fail to realize the impact on their people, processes methods and tools as they proceed down the outsourcing path. This naive attitude results in outsourcing projects that are too often disastrous rather than fruitful experiences for organizations [Power et al 2004].

Understanding the sources of problems in outsourcing becomes increasingly important as organizations increasingly apply outsourcing as a strategy. Knowing what risk factors may threaten an IT-outsourcing project is the starting point for ensuring those risks do not evolve into full-blown problems. Once potential threats to a project have been identified, mitigating actions can be taken to reduce the likelihood they actually occur. Simply knowing a comprehensive list of risks is not enough to ensure success. It is more important to know which of the many possible risks are most likely to cause problems, either because they are difficult to mitigate or because they are difficult to anticipate [Taylor 2006].

This chapter presents numerous risk factors that have been collected through an extensive literature search. These risk factors have been divided into two groups related to the client organization (paragraph 4.2) and the service provider (paragraph 4.3). Accordingly the concept of risk management in IT-outsourcing is discussed in paragraph 4.4. This paragraph describes how the risk factors can be identified, assessed and mitigated.

4.2 Client organization

Client organizations should consider IT-outsourcing as a major strategic decision and should realize that it involves a large number of risk factors. The first risk is that managing an external outsourcing service provider is significantly different than the management of the internal IT department [Gottschalk & Karlsen 2005]. Examples are procurement and contract management to guarantee that the service provider delivers the service in compliance with the predefined performance levels [Ngwenyama & Sullivan 2007]. Furthermore, the coordination of the IT tasks between the internal organization and the service provider becomes more complex. The client organization has to keep in mind that the responsibilities are clearly defined and understood. These situations most likely lead to an increase of the anticipated management costs [Blyth 2008]. A final important concern for the client organization is to manage the complex outsourcing relationship effectively. Client organizations should take time to determine the type of relationship they seek to develop, such as whether it is purely cost driven versus focused on strategic partnering and furthermore ensure that there is alignment within their organization in dealing with the service provider [Gottschalk & Karlsen 2005]. As a general rule, organizations do not outsource activities that directly contribute to their strategic, competitive advantage. Organizations that consider outsourcing such capabilities should recognize that they are putting execution at risk [Autry et al. 2007].

Executive management should not consider outsourcing as a quick fix for business problems, like blurry costs structures, substandard quality, insufficient internal skills and a lack of business focus. Top management should understand the long term ramifications to their overall business strategy [Koh et al. 1999]. True commitment to a successful outsourcing initiative requires executive involvement to resolve fundamental business problems prior to establishing an outsourcing initiative and passing the problems on to a potential service provider [Power et al 2004]. Besides, the management of the client organization should be sympathetic towards the service provider. This means that the client organization should focus less on the costs of the outsourcing deal because the service provider actually contributes to their business value [Outsourcing performance 2008]. Furthermore the management should be willing to provide the service provider access to the core of the business processes and create sufficient discipline to provide the service provider with relevant information and keep him informed of internal developments. An important other risk factor is the changing motive within client organizations. Outsourcing motives can change over time due to an organizational change, the appointment of a new commissioner or a review of the sourcing policy [Gonzalez et al. 2008]. It is difficult for a service provider to adjust to these new conditions. The primary motive for outsourcing is often cost reduction, but could change over time towards more strategically objectives [Gonzalez et al. 2008]. Examples are stimulating innovation, increasing flexibility and improving quality. As a result, the service provider has to re-transition their services. It is important to anticipate to these developments by discussing the possibilities to re-negotiate the contract [Oosterhaven & Roozendaal 2007].

The client organization must be aware that outsourcing will definitely impact the internal organization and personnel. Outsourcing rumors can impact all levels of the organization and create a negative impact on organizational productivity. Power et al. [2004] conclude on the basis of empirical research that many client organizations, see employee productivity decreases, experience low employee morale and perceive a lack of trust in the organization long before the start of an outsourcing initiative. Gonzalez et al [2008] state that employees perceive that outsourcing decisions and even considerations represent a lack of trust in their professional capabilities. This results in the fact that client organizations might experience considerable problems before the transition has begun [Blyth 2008]. Communication with employees is essential to ensure they understand their roles and are properly compensated. Companies that fail to do this are at risk of seeing key employees and intellectual capital leave [Power et al. 2004]. A common cause of ending the outsourcing contract is poor demand management [Ngwenyama & Sullivan 2007]. Often there is a lack of communication from the top-management, both in the client organization and the service provider [Gonzalez et al. 2008]. In order to create the right alignment between the demand and delivered IT services, it is necessary to take care of demand management in three levels: strategic (board members), tactical (contract managers), and operational (end-users) [Oosterhaven & Roozendaal 2007].

Most client organizations are not aware that their knowledge of outsourcing and corresponding required management is minimal [Gonzalez et al. 2008]. To be successful, client organizations should identify, establish and implement proven project management methodologies and industry best practices [Fleming & Low 2007]. Outsourcing projects exist of different steps including: strategy formulation, request for proposal, service provider identification and selection, contract negotiation, project transition and outsourcing governance [Ngwenyama & Sullivan 2007; Power et al. 2004]. In many situations, client organizations are willing to rush through these phases, without having answered and identified the key issues like: the experience and skill level of the service providers' personnel, the service providers' technical experience in the client organizations industry, the financial stability of the service provider, defining the right service level agreements etc. During these critical lifecycle phases, the client organization must realize that it should be in the driver's seat and has the ability to document requirements, create detailed proposals, select the service provider and propose the contract terms that clearly set business requirements and expectations. Rushing through steps can be detrimental to the initiative and, in some cases create irrevocable damage [Power et al. 2004].

Aubert et al. [2000] suggest that the client organizations' lack of expertise with outsourcing contracts may lead to increased costs. The service provider has more information and knowledge about IT processes and contracts which give them a definite edge. The service provider may furthermore hide information that will appear later in the contract. Another risk is the loss of innovative capabilities. Client organizations often only define the activities (or processes) that the service provider should take over, but they forget to define their innovative ideas. This results in the fact that service providers primarily deal with providing the requested activities and not with the innovativeness. This issue deals

with a difference in perception and interpretation of the contract. A solution would be the formulation of clear innovation objectives and proper control to realize these objectives. Often this is not the case and therefore innovation should be a part of the contract. Aubert et al. [2000] found that when a service provider began to cut services, the client organizations managers responded very poorly. As part of the outsourcing process, client organizations need to understand how to manage the ongoing outsourcing relationship.

The provided service does often not meet the client's expectations. A solution for this problem is setting up very specific outcome expectations [Taylor 2006]. Satisfaction is related not only to what has been delivered and how well the process went, but also to what was expected in the first place. The degree of disconfirmation of expectations (the difference between outcomes and expectations) strongly correlates with the level of customer satisfaction. If expectations are high to start with, and the outcomes are not quite as high as those expectations, than customers will ultimately be dissatisfied, even if final functionality and performance is a good match with requirements [Taylor 2006]. Identifying key performance metrics and their values is a challenge, particularly for service types of tasks where the final "product" is intangible and often difficult to quantify. Research shows that a lot of client organizations omit, overlook, or underestimate many (hidden) costs related to outsourcing [Juras 2008; Delen 2005]. Hidden costs are costs which increase the budgeted costs and therefore result into a threat to the economic efficiency of the outsourcing operations [Juras 2008]. Examples are overlooking the omission of an important task in the contract of which the client organization was unaware or simply forgot to include. In this case the service provider will perform the task, however, at additional costs. Although this reflects more on poor contracting, it is still an unexpected cost. Another example is the under-forecasting of work volumes by the client organization. In this case, the service provider may find the work volumes to be higher than planned and charge accordingly. Hidden costs can also relate to unexpected communication technologies needed, particularly in the case of global sourcing and the time requirement for relationship management. These expenditures can represent an important proportion of the total costs of an outsourcing agreement, between 5% and 7% of the value of an outsourcing contract [Bahli & Rivard 2005]. In some instances, these additional costs represent the very amount that a client organization was expecting to save by entering into an outsourcing agreement. There are examples where the actual costs of services provider by the service provider were much higher than those related to internal provision of the same services. It might be a solution to consult an outsourcing expert, who is familiar with these pitfalls [Blyth 2008].

4.3 Service provider

It is a risk for the client organization that it selects the wrong service provider. The number of service providers determines the extent to which a client organization has reputable and trustworthy alternatives [Bahli & Rivard 2005]. Having limited choices regarding service providers will leave the client organization in a poor position to negotiate future contracts and with little leveraging power to switch to another service provider without incurring costs. The client organization is subject to opportunistic bargaining power throughout the contract as well as at the time of contract renewal. Opportunistic behavior from the service provider is defined as “self-interest seeking with guile” [Chiou & Shen 2006]. Client organizations can safeguard themselves against opportunistic behavior due the conclusion of adequate contract. However, this costs more time and money [Blyth 2008]. Service providers should have a clear profile that shows which services belong to their specialties and which specialties match with the client organizations needs.

The client organization should try to determine to what extent the service provider has interest in the client organization. Giarte and Morgan Chambers identified several indicators that determine the service providers' interest in the client organization [Outsourcing performance 2008]. Examples are reporting models or bonus structures of the service provider. Many service providers make use of organization- and reporting models that are not client oriented but focus on maximizing the profits for the separate business units. The consequence is that everybody focuses on their individual results and forgets the overall interest. The motives behind incentives are often not client oriented. Bonuses are often related to winning client organizations and not on client satisfaction. Another issue is the transparency of the service provider. Service providers should be clear how they can help a client organization with lowering their costs. This means that offering the lowest price is not always the best solution. Last but not least, service providers should not only focus on profit. Profit is a satisfier for the very short term, and could generate dissatisfaction in the longer term [Outsourcing performance 2008]. A service provider may not be able to respond to rapid changes in the client organizations' business environment. This can cause disputes between the parties over the rendered services. The service provider may overestimate his capabilities, or may be unable to handle the operation as technology changes [Aubert et al 2000]. If the service providers' skills do not advance, service levels will certainly decline and the cost-reduction potential will vanish. If the service provider lacks expertise with the business aspect of the activity, the service provider exposes the client organization to a business risk. This may affect the client organizations profitability. Client organizations have to invest in training the service providers' personnel and explaining user's requirements, which may be costly.

An important strategic risk is related to the dependency and power of the service provider. If the client organization is highly dependent on a service provider, the risk of lock-in may arise [Blyth 2008]. This is particularly true in projects that require specialized technology, equipment and specialized training of staff. Customized services may involve the risk that the client organization becomes overly dependent on the service provider. Asset specificity refers to investments in physical or human assets

that are dedicated to a particular relationship and whose redeployment entails considerable switching costs. Asset specificity makes the investor (client organization) vulnerable to ex-post exploitation, hence the lock-in problem [Blyth 2008]. This may result in short-term problems, such as lack of performance on the part of the service provider that disrupts operations, and can also have strategic consequences, as the organizations future direction is tied to that of the service supplier. As a result, the service provider may become overconfident which lead to decreasing quality of the provided services. The service provider may use its specific investments into a relationship as bargaining power over the client organization at the time of contract renewal. Other service providers would have to make the same investment if they were willing to get the contract. Furthermore, the client organization is threatened by potential bankruptcies and other financial or reputation damages occurring to the service provider [Howart & Tarzey 2008]. Organizations should avoid outsourcing highly integrated functions, particularly when significant adaptation with a service provider is required.

The economies of scale realized by the service provider can also cause negative effects for the client organization. Many service providers achieve economies of scale by aggregating the needs of different, sometimes competing, client organizations [Gottschalk & Solli-Saether 2005; Sullivan & Ngwenyama 2005]. This situation can create proprietary risk and pooling risk. Proprietary risk means that information of the client organization may leak to an external party or be commingled with that of another client organization. Proprietary risk increases when the function outsourced is strategic in nature and is designed to provide a competitive advantage to the firm [Sullivan & Ngwenyama 2005]. Contention risk arises when a large number of client organizations may simultaneously compete for the services of the service provider, which the service provider may than not be able to deliver. This is especially true for service providers with client organizations concentrated in a particular industry, which may be suddenly subject to same trends or may want the same emerging technology [Sullivan & Ngwenyama 2005]. Service providers do not have infinite capacity and resources, thus typically balance these resources with the needs of many different client organizations [Kakabadse & Kakabadse 2005]. Finally, service providers may cause the lost of internal IT knowledge [Munoz & Welsh 2006]. Client organizations outsource their IT based on the idea that service providers have the latest technologies. This reasoning has a downside and involves the risk of losing internal IT knowledge. Blyth [2008] states that this loss is caused by the fact that the activities and technologies performed by the service provider constantly change and renew over time due to permanent technological innovations and improvements. The result is that after some innovations and changes the IT-situation has become incomprehensible for the client organization. This situation is often made worse by the fact that there is no or very little transfer of newly gained IT knowledge from the service provider to their client organizations [Blyth 2008].

It is important that both cultures of the client organization and service provider match. It is recommended that each level of governance (strategic, tactical, and operational) has a matching contact person within the organization [Hussey & Jenster 2003]. Not only has the communication between client organization and service provider caused troubles. Also the internal communication and relationships are very important. There is often a lack of communication between the demand organization and the supply managers, or between the demand organization and the end-users [Oosterhaven & Roozendaal 2007]. It is crucial that the end-users have the change to get accustomed to the new disciplined culture. Furthermore, it is important that the end-users did have had some participation in the process. Research shows that in more than 50% of the examined cases there is a failure because the tactical and operational levels had different expectations of the project [Oosterhaven & Roozendaal 2007]. Cultural differences between the client organization and the service provider might also have a large impact on the performance. Client organizations tend to believe that their norms, values and ethics will be similar to the ones of the service provider. Once they cooperate with the service provider, they realize that the service providers' organizational structure, time management, business approaches, decision-making processes and teamwork may be very different from their own [Kliem 1999]. Language may also form a problem. Even if the service provider speaks English, it may be a dialect that causes distortion in key points. Many offshore outsourcing relationships get into trouble due to cultural differences, while both the client organization and service provider believe that they are fulfilling their obligations. Yet both sides end up being disappointed with the results and frustrated with the relationship [Kliem 1999]. An example is that Indian companies are hesitant to tell their western clients that they do not have the capabilities to execute an assignment, or that they are experiencing problems during a project. As a result, the client organization does not know in time that their project is not on schedule or that there are significant cost overruns or functional deficiencies [Power et al. 2004].

Disagreements between the client organization and service provider may lead to disputes and lawsuits. Disagreements are not only disruptive, but can also be very costly [Munoz & Welsh 2006]. Apart from the direct costs of lawyers' and experts' fees, indirect expenses associated with reputation effects may also be incurred. Even when disagreements do not lead to disputes, they can be costly. Kern [1998] describes a case wherein disagreements between the relationship managers of the client and service provider became ongoing confrontations [Bahli & Rivard 2005]. At a certain point, both managers had to be replaced. This proved very costly for both the client organization and the service provider. Disputes can also lead to service debasement. For instance, a client organization recently sued their service provider to dissolve a 10-year old \$300 million outsourcing contract. According to the client organization, the service provider had failed to achieve timely completion of a project. The service provider however argued that the uncooperative and obstructive actions of the client organization had caused the performance problems [Bahli & Rivard 2005].

An important element of building an effective “relationship architecture” is a joint communication plan. The broader the scope of the outsourcing engagement, the more important it becomes to proactively communicate strategic intention, expectations, timeliness and business benefits to the client’s employees and key stakeholders. Both organizations should apply clear definitions for issues like end-to-end management, process management, culture and innovation [Outsourcing performance 2008]. Client organizations tend to set stringent service level agreements to be achieved in the early phase of the outsourcing transition. Usually these agreements require detailed knowledge of the client organizations business processes and functions, which make it very difficult to comply to. Client organizations must set realistic goals that allow the service provider to gradually improve schedules, quality and costs over time based on objective metrics mutually agreed upon by both client organizations and service providers [Power et al. 2004].

Uncertainty plays a major role in IT-outsourcing because both organizations have incomplete or imperfect information. This means that, in the face of uncertainty, contracts are unavoidably incomplete and may require renegotiation and frequent adjustments when unexpected contingencies occur [Kliem 1999]. It should also be possible to talk about re-negotiation, in cases the targets and objectives change over time. Often too much details are put down in the contract, which means that the service provider has too little room to maneuver. The contract should arrange the basic conditions and not the technical interpretation of the execution of the activities by the service provider. In 80 percent of the cases in which a dialogue is performed, there is no new tender necessary [Oosterhaven & Roozendaal 2007].

4.4 Risk management

Client organizations can both take internal and external measures to reduce certain risk factors [Raz & Michael 2001]. Internal measures are for example applying standard IT systems within the client organization [Ghoderswar & Vaidyanathan 2008; Adeleye et al. 2004]. By doing so, the number of available service providers will increase, the risk of service provider opportunism will reduce and it enables the possibility of multi-sourcing. Client organizations can increase their insights in IT-outsourcing and IT knowledge by establishing a responsible outsourcing contact and maintaining a simplified manual. In this way client organizations gain control over the outsourced operations and facilitate decision making. In addition, the unanticipated monitoring and negotiation costs turn into fixed costs [Ghoderswar & Vaidyanathan 2008]. An established responsible contact might also increase the quality of the requested services. To reduce the risk of service provider lock-in, client organizations might want to observe the financial situation of the service provider or take charge of the documentation by the service provider. These two measures enable client organizations to take appropriate reactions, like changing from service provider or facilitate back sourcing [Raz & Michael 2001]. Concluding short term outsourcing contracts, consulting experts and opting for ‘total

outsourcing' are measures to combat hidden costs. If the client organization wants to conclude short term contracts, the unanticipated costs for monitoring and negotiating turn into fixed costs [Power et al. 2004]. Furthermore, the client organization can change quicker from service provider or realize back sourcing. If the client organization consults external experts, the risk of concluding incomplete outsourcing contracts reduces, with the result of less unanticipated costs. In the extreme case, the client organization can opt for 'total' outsourcing. There are hardly any coordination cost related to total outsourcing, but the client organization becomes highly dependent on the service provider [Goo et al. 2008]. Finally, client organizations can improve the innovative ability of their IT by defining it as an internal task. As a result the client organization gets deeper insights into the business processes and obtains consistencies [Goo et al. 2008]. To secure the internal and external data security, personnel could be sensitized for the relevance of IT and data. In addition, client organizations should regularly check the access of the authorizations. Client organizations could stipulate compensation agreements, or regularly call in external partners for internal IT audits, to combat the loss of control over the outsourced IT functions [Raz & Michael 2001].

IT-outsourcing turned out to be more difficult to manage than many firms expected [Lacity & Willcocks 2000]. The manageability of IT-projects can be increased by performing risk management [de Vries, 2003; Hallikas et al 2004]. Risk management should be integrated within the processes of different departments and organizations. Different management layers can control and reduce the outsourcing risks and threats by integrating risk management into the business processes [Lacity & Willcocks 2000]. Risk management is often perceived as a simple process but it involves a great diversity of potential outcomes and measurement systems that make it complex [Ritchie & Brindley 2007]. Wijnveld [2000] defined a generic method for IT-project risk management, based on both scientific and practical methods. This method consists of six steps: *awareness, mission, risk analysis, policy, strategy and measures*.

All steps are interrelated. This process has a cyclic character, meaning that results from previous phases form the input for next stages. The identification of risk factors is a crucial phase in risk management practices [Adeleye et al. 2004]. If the risk factors are identified, the organization becomes aware of events or factors that cause uncertainty. Furthermore the organization can recognize if it is able to manage these (negative) scenarios proactively [Hallikas et al 2004]. Key features of risk identification are: information gathering, transmission and filtering. If the management of the organization becomes aware, they can change their policy and proceed to the next phases. The mission of risk management represents which distinctive role risk management should play within the organization. An organization should create a mission statement to express the mission. The mission contains the context of values, expectations and objectives and should provide more insight. The next step is a risk analysis. The management of an organization wants to know which (potential) risk factors could damage the project and what measures should be taken to control these risk factors [Adeleye et al. 2004].

Once the risk factors have been identified, the following step is risk assessment and prioritization. These two steps support the choice for suitable management actions [Aubert et al. 2005]. When the identified risks have been assessed, it is useful to present them in a risk diagram. An example of a risk diagram is presented in figure 8 below.

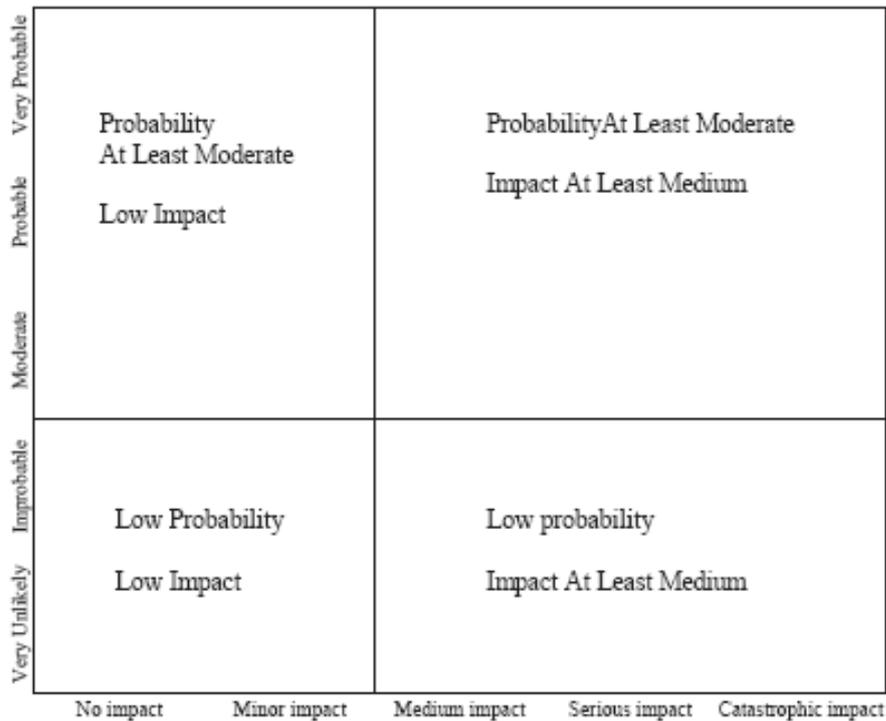


Figure 8: Risk Diagram [Hallikas et al 2004]

The risk diagram gives an overall view upon all risks, and makes the most important risks requiring the most attention visible. Furthermore, it indicates whether the risks can be reduced by decreasing their probability or their consequences [Hallikas et al 2004]. A risk analysis is becoming more popular among organizations as part of an IT-project. The reason behind this trend is that the involved changes within organizations and the impact of the related risk factors are huge. It is the objective of a risk analysis to gain insight in all situational- and risk factors and accordingly eliminate those risks or create strategies to control these risks. The risk analysis could be performed prior the initial phase, when a client organization is considering outsourcing, and during the actual outsourcing process to evaluate the progress [Adeleye et al. 2004]. Preferably, a risk analysis is being performed within a group.

Performing a risk analysis in a group has in general more value, because the different disciplines and angles have multiple estimations of the situations. Repeating a risk analysis depends on the risks, the size of the project and possibilities to take measures to reduce the risks. There are mainly two different kind of risk analysis [Overbeek, Roos & Spuit 2000; Coumou 1996]: a standard approach and a customized approach.

The standard approach contains a quick scan and a baseline approach. The quick scan is a method in which the necessary information is obtained by means of an external standardized questionnaire [Overbeek, Roos & Spuit 2000]. The baseline approach is a more in-depth method whereby on the basis of a list of measures is being monitored to what degree these measures are actually being implemented. The customized approach involves a qualitative risk analysis. In this method the stakeholders discuss the risk factors on the basis of estimations regarding the damage that will take place when the threat occurs [Overbeek, Roos & Spuit 2000]. A qualitative risk analysis does not provide absolute values for the risk factors, but can indicate the size of those risks in abstract terms like 'high', 'average' or 'low'. Conducting a situation and risk analysis, by means of a checklist, creates the foundation for a client organization to control the risk factors and helps secure the success of outsourcing [Coumou 1996]. It enables the client organizations to take concrete measures to control or eliminate risk factors, evaluate the service provider and the contract and improve the relation and cooperation with the service provider [Coumou 1996]. To make the risk analysis succeed, it is important that the organization creates a holistic picture [Overbeek, Roos & Spuit 2000]. This picture includes all risks within all relevant areas and determines which risks require the highest priority. It is important that stakeholders share risks and information with each other. This interactive approach helps to create an understanding of the risks and threats, stimulates participation and increases the transfer of knowledge.

The organization should take the risk analysis into consideration when it creates their policy [Hallikas et al 2004]. The next step is formed by vision and policy. The vision of the organizations shows the direction it should follow now the organizations knows the current risks on the basis of the risk analysis. The policy is the collection of objectives, demands, conditions, values, principles and priorities to control the risks [Blyth 2008]. The policy is formed on the basis of the collected knowledge during the awareness phase, the information that is obtained during the risk analysis and the vision of the organization. The policy should also mention the principles of the managed risk strategy. The final phase is formed by the measures. IT-applications rapidly follow the technical developments, whereby all kinds of technical and organizational changes occur. These related new risks should be covered. Controlling these risks requires continuous attention for measures how to cover the risks [Blyth 2008]. The organizations and their environments are not static, thus also the risk status changes. The recognized risk factors can be monitored to identify the potential increasing trends in their probability or consequences. In addition new significant risk factors may appear [Blyth 2008].

To identify these, it is necessary to monitor the changes in the network, customer needs, technology, partner strategies and competitors and to update the risk assessment correspondingly [Aubert et al 2000; Hallikas et al 2004].

Performing risk management is no guarantee for a successful outsourcing project. Intractable risk factors and unforeseen risk factors can still negatively impact the outsourcing process and/or outcome [Taylor 2006]. Intractable risks are those risks that resist mitigating actions. The risk factors continue to impact the outsourcing project despite the manager's best efforts to address them at the start [Taylor 2006]. Unforeseen risks are typically overlooked or simply don't seem likely to happen at the risk assessment stage, so that no action is taken to mitigate them. Both intractable and unforeseen risks pose a significant threat to outsourcing success even on projects that are subjected to a rigorous pre-project risk assessment. Taylor [2006] mentions that the most likely intractable risk factors are: schedule and budget management, problems with supplier staffing and difficulties arising from the newness of technology. The most common unforeseen problems tended to be client relationship problems. Client relationship problems appeared unlikely to be expected at the start. The signs that these risks may occur are typically not evident in the early phase of outsourcing. Furthermore, their intangible nature makes them difficult to quantify and assess.

4.5 Summary

There are many risk factors related to client organization. Client organizations should improve their project management skills. They should make more use of project management tools and risk management. The predominance of client relationship problems supports the need for strong measures to meet the relationship needs of client organization. Project managers should pay attention to relationship issues both with their service provider and within their own organization at the start of the project [Taylor 2006]. Client organizations should consider IT-outsourcing as a major strategic decision and should realize that it involves a large number of risk factors. The first risk is that managing an external outsourcing service provider is significantly more complex compared to internal IT management [Gottschalk & Karlsen 2005]. As a general rule, organizations do not outsource activities that directly contribute to their strategic, competitive advantage. Organizations that consider outsourcing such capabilities should recognize that they are putting execution at risk [Autry et al. 2007]. The client organization must be aware that outsourcing will definitely impact the internal organization and personnel. Outsourcing rumors can impact all levels of the organization and create a negative impact on organizational productivity. Most client organizations fail to realize that their knowledge of outsourcing and required management is minimal. To be successful, client organizations should identify, establish and implement proven methodologies and industry best practices. Research shows that a lot of client organizations omit, overlook, or underestimate many (hidden) costs related to outsourcing [Delen 2005]. Hidden costs are costs which increase the budgeted costs and therefore

result into a threat to the economic efficiency of the outsourcing operations. It is a risk for the client organization that it selects the wrong service provider. If the service provider lacks expertise with the business aspect of the activity, the service provider exposes the client organization to a business risk. It is important that both cultures of the client organization and service provider match. It is recommended that each level of governance (strategic, tactical, and operational) has a matching contact person within the organization. Client organizations can both take internal and external measures to reduce certain risk factors. The manageability of IT-projects can be increased by performing risk management [de Vries, 2003; Hallikas et al 2004]. Risk management should be integrated within the processes of different departments and organizations. Performing risk management is no guarantee for a successful outsourcing project. Intractable risk factors and unforeseen risk factors can still negatively impact the outsourcing process and/or outcome [Taylor 2006].

Chapter 5- Outsourcing relationship

5.1 Introduction

In the early years of IT-outsourcing, the role of a service provider was limited in terms of the size of the contract and the type of service. Traditionally, the services that were provided were the maintenance of hardware or program subcontracting. Hussey & Jenster [2003] state that the type of relationship in IT outsourcing is changing from a client-supplier relationship to a more strategic partnership. Empirical research [Hussey & Jenster 2003; Oosterhaven & Roozendaal 2007] shows that the relationship quality and outsourcing success have a strong positive relationship. It indicates that stimulating a cooperative relationship based on trust, business understanding, benefit and risk share, and commitment is critical to reap the greatest benefits from IT-outsourcing. The skill sets that manage the relationship between the client organization and service provider become a new strategic asset [Hirschheim 2009]. Just like marriages or friendships based on trust and commitment, not all outsourcing relationships work well. The participants may find themselves wishing they had planned better in addition to exclusively relying on trust and commitment. A successful relationship requires a combination of soft-based and hard-based relationship management. Hard-based relationship management allows a relationship to be established within a strong contractual framework to govern the ensuing soft-based relationship [Kern & Willcocks 2000; Koh et al. 2004]. A relationship that combines the legal contract with mutual trust allows for a much stronger bond between the client organization and service provider. The latter forms an effective partnership and plays a major role in creating a successful outsourcing agreement [Kim & Park 2003]. The Dutch IT-outsourcing market performs increasingly well, based on the quality of the Service Providers [Outsourcing performance 2008]. Service providers like to profile themselves as 'partners' that actively think and act in the interest of the client. Giarte notices however that most of the client organizations do not fully support and recognize this statement.

This chapter discusses the outsourcing dip. Every outsourcing deal will experience a moment in time in which the organizations decrease their efforts and perceive lower results. The outsourcing dip is a generally accepted and recognized phenomenon among client organizations and service providers. Furthermore, the model from Kim and Park's [2003] is introduced. Kim and Park created a model which determines the outsourcing satisfaction for three groups within the client organization. Accordingly the transition from a client-supplier relationship to a so-called outsourcing partnership is discussed. This transition requires the necessary changes and conditions [Gottshalk & Solli-Saether 2006]. Finally the concept of collaborative risk management and more intense forms of collaborations are introduced.

5.2 The outsourcing dip

Client IT-managers judge their service providers in general more positively than in previous years [Automatiserings Gids 2009]. Research from Giarte [Outsourcing performance 2008] shows that in general the willingness among client organizations to recommend their current service provider has increased. This satisfaction results in loyalty: in most cases (more than 75%), the client organization is willing to extend their current outsourcing contract with their service provider [Oosterhaven & Roozendaal 2007]. Client organizations indicated also in that particular research that there is still potential to improve the IT-outsourcing relationship. Every outsourcing deal will experience a moment in time in which the organizations decrease their efforts and perceive lower results. This dip, visualized in figure 9, is called “The outsourcing dip” and it is a generally accepted and recognized phenomenon among client organizations and service providers.

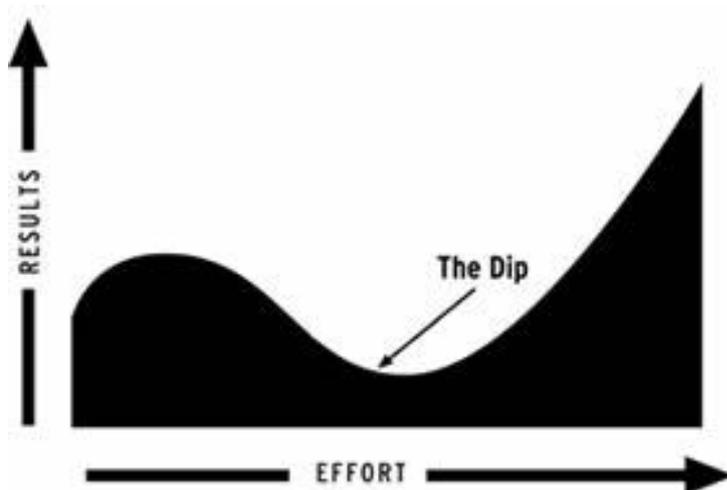


Figure 9: The outsourcing dip [Gottshalk & Solli-Saether 2006]

During the initial negotiation phase service providers promise large improvements to seal the deal, while the management board of the client organization apply the same technique to persuade their business council (OR) and personnel. If these expectations can not be met, or the mutual trust experiences some bumps, the satisfaction decreases [Koh et al. 1999]. In order to get out of this dip, organizations should create a proper basis in which the end-users are satisfied and the service provider shows an understanding of the client organizations business [Ghoderswar & Vaidyanathan 2008]. This means that the perception is becoming more important than the realization of the technical service levels [Hussey & Jenster 2003].

Communication between the client organization and service provider is very important [Fleming & Low 2007]. It should be clearly communicated what needs to be done, what the rules of the game are and what the definition of the new plans is. End-users and managers should realize that outsourcing involves a shift towards more formal and stricter policies [Kim & Park 2003]. Outsourcing implies a change in the business processes and procedures. As a result the fastest and easiest routes to change are closed due to the formalization of processes. Besides, it is important that the client organization pays more attention to the architecture and governance [de Vries 2003]. Often client organizations want to maintain the old situations and habits, while this actually increases risk and opposes efficient problem solving [Hussey & Jenster 2003]. Client organizations and service providers should not ignore the outsourcing dip, but should try to actively manage the anti-dip. Therefore, the client organization and service provider should improve their relationship. Kim and Park's [2003] created a model (figure 10) which determines the outsourcing satisfaction for three groups within the client organization in an IT-outsourcing relationship. These three groups are: *the outsourcing project directors* (management board), the *end users* and *operators*.

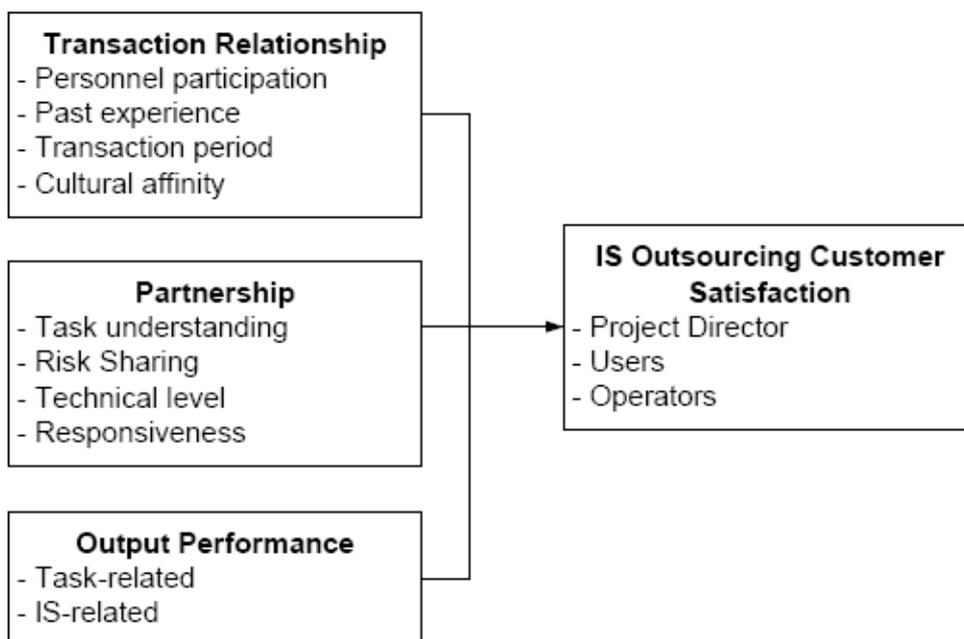


Figure 10: Outsourcing Satisfaction [Kim & Park 2003]

According to Kim & Park, the project director is responsible for accepting the system provided by the service provider. The end-users are the employees in the client organization who use the information systems while the operators are a customer group that represents the maintenance technologists

within the client organization. Kim and Park [2003] found that the factors that influenced each of the groups within the client organization differed. The project director's satisfaction was influenced by the transaction relationship and partnership constructs. The end-users and operators satisfaction was influenced by the output performance. This means that short-term consequences are important for these two groups [Kim and Park 2003]. Empirical research [Ghoderswar & Vaidyanathan 2008] shows that the quality of the relationship and outsourcing success have a strong positive relationship. It indicates that stimulating a cooperative relationship based on trust, business understanding, benefit and risk share, and commitment is critical to reap the greatest benefits from IT-outsourcing.

5.3 Transition from transaction to partnership

The transition from a client-supplier relationship to a so-called outsourcing partnership requires the necessary changes and conditions [Gottshalk & Solli-Saether 2006]. Many client organizations experienced difficulties in forming and managing a successful outsourcing relationship with the service provider [Gottshalk & Solli-Saether 2006; Outsourcing performance 2008]. This transition is visualized in figure 11 below.

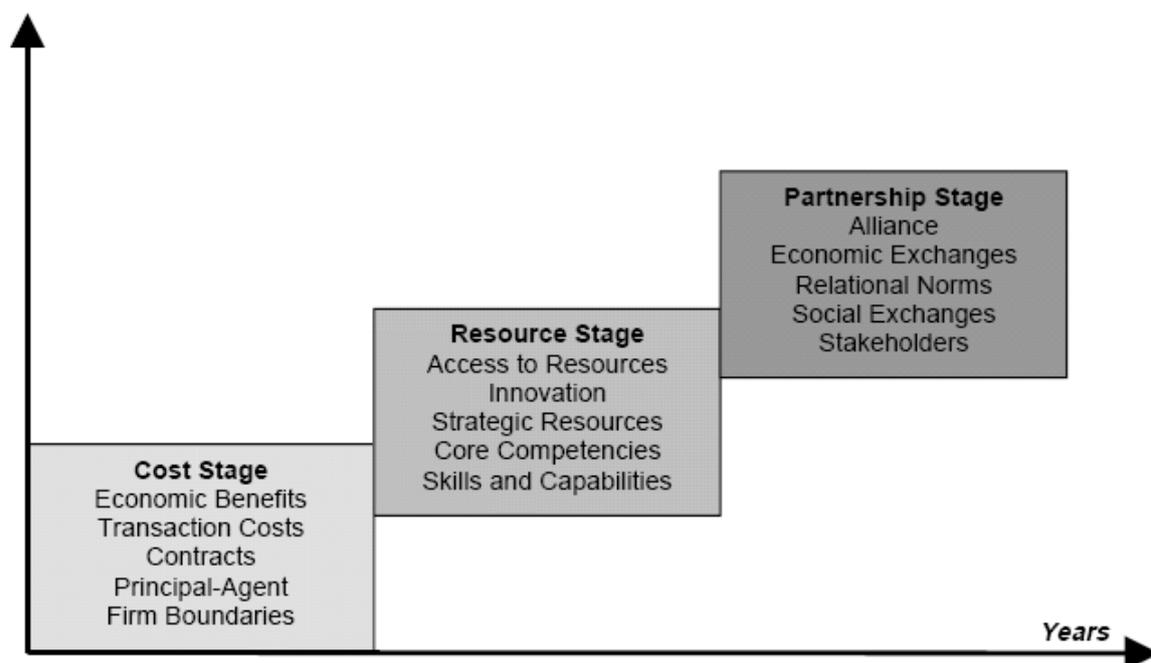


Figure 11: Maturity Model for IT-outsourcing [Gottshalk & Solli-Saether 2006]

It is the purpose of this figure to understand the current situation of the outsourcing relationship and to develop strategies for moving to a higher stage in the future. The model is based on several management theories. The cost stage is concerned with high economic benefits, low transaction

costs, effective contracts, good principal-agent cooperation and efficient division of labor from firm boundaries. The resource stage is concerned with access to providers' resources, possibilities for innovation, strategic resources and development of core competencies in the client organization in terms of skills and capabilities. The third and final partnership stage is concerned with alliance work, mutual relational norms, social exchanges and balancing stakeholder interests. As an outsourcing relationship matures, the maturity model suggests that performance measures develop beyond cost minimization and operational efficiency towards business productivity and technology innovation [Gottshalk & Solli-Saether 2006]. Accordingly they develop further towards business benefits and achievement of mutual goals for client organization and service provider. When an outsourcing relationship has solved all problems at the cost stage, the organizations can move on to the resource stage. Solving all problems implies that the client organization achieves the intended cost savings, the transaction costs are at acceptable level, the contract is successful in preventing opportunistic behavior, principal and agent avoids conflicts and the division of labor between the client organization and service provider works satisfactorily [Gottshalk & Solli-Saether 2006]. The relationship is ready to move from the resource stage to the partnership stage, when the service providers' value proposition is working in terms of successful application of service provider resources for the client organization and when the client organization is able to work on its core competencies [Gottshalk & Solli-Saether 2006].

The strength of a successful partnership is that it enables both organizations to achieve the organizational goals and builds a competitive advantage that each organization could not easily realize by itself [Gottshalk & Solli-Saether 2006; Palm 2001; Kern 1997]. To make the partnership work, the organizations should try to enhance their partnership quality by increasing their intimacy. The strength of a partnership could be traced in 9 factors [Fleming & Low 2007; Gottshalk & Solli-Saether 2006]: *participation, joint action, communication quality, coordination, information sharing, age of relationship, mutual dependency, cultural similarity* and *top management support*. Active participation of the organizations is important for enhancing the sustainability of the partnership over time. When one partner's actions influence the ability of the other to compete effectively, the need for participation in specifying roles, responsibilities, and expectation increases. Joint action indicates that organizational boundaries become penetrated by the integration of activities such as long range planning, product design, value analysis, design of quality control, training and education. According to the social exchange literature, effective communication between partners is essential in order to achieve the intended objectives. Intensive communication should lead to better informed parties, which in turn should make each party more confident in the relationship and more willing to keep it alive. Good coordination is nearly invisible. Coordination is mostly noticed clearly when it is absent in the inter organizational relationship. Coordination is needed to maintain stability between participants in a dynamic environment. Information sharing is the extent to which critical or proprietary information is communicated to one's partner. Partnerships can create a competitive advantage through the strategic sharing of organizations' key information [Fleming & Low 2007].

Many researchers [Fleming & Low 2007; Gottshalk & Solli-Saether 2006; ; Kern 1997] report that closer relationships result from more frequent and relevant information exchanges among high performance partners. Participants are expected to sustain more effective relationships over time by sharing information and by being knowledgeable about each other's organization. Participants will continue to interact with each other only if they perceive the exchange relationship as an attractive option. If not, they will find a more valuable partner with which to interact. Relationships that have lasted a long time are more likely to continue than younger relationships because participants have built mutual understanding and eliminated the need for detailed formal agreement through adjustment over time. Dependency between organizations results from a relationship in which participants perceive mutual benefits from interactions. The relative dependency has to do with the firm's perception of its dependency on the partner firm relative to the partner's dependency on it. Mutual dependency between participants increases when the size of the exchange and importance of exchange are high, when participants consider their partner the best alternative and when there are few alternatives or potential sources of exchange. Organizational culture is defined as "the pattern of shared values and beliefs that help individual understand organizational functioning and provide norms for behavior in the organizations". Partnership members with similar cultures should be more willing to trust their partners. If the participants do not have similar organizational cultures, their relationship may create divergent values that make it difficult for them to trust one another and provide a fundamental cause to destroy the business relationship. Finally, top management support is considered a prerequisite for every successful outsourcing partnership. If a partnership is to overcome the inevitable divergence of interests between participants, top executives have to share an understanding of the specific benefits of collaboration [Fleming & Low 2007; Gottshalk & Solli-Saether 2006].

5.4 Risk management in networks

Successful outsourcing requires successful risk management [Hunton & Williams 2008]. As outsourcing models evolve towards partnerships, so should the risks factors and risk management. The trend from major single provider, long-term outsourcing deals, towards a more segmented, multi-provider approach coupled with closer collaboration between the organizations adds new complexities [Ritchie & Brindley 2007]. These conditions should be taken into account in the risk analysis of any proposed model [Hunton & Williams 2008]. In many business environments, networking is almost an inevitable solution to help organizations respond to rapid market changes [Hallikas et al 2004]. Organizations in a network deepen their relationship with partners and thus become more dependent on each other, just like in outsourcing. Motives to enter a network are also pretty similar to outsourcing motives, namely, reducing transactions costs, creating the ability to concentrate on core skills, access to key technologies, and risk sharing among partners [Hallikas et al 2004].

The risk management processes in a network environment have basically the same phases as risk management for a single organization; identification, assessment, mitigation and monitoring [Ritchie & Brindley 2007; Hallikas et al 2004]. However the interpretation of risk management in a network is different. Since every organization is responsible for its own risks, it must identify the risks from its own perspective. This does not mean that the potential benefits of sharing information, opinions and visions with outsourcing partners should be neglected [Hallikas et al 2004]. In a network, the risk diagram (discussed in figure 8, paragraph 4.4) could be used as a method for the information exchange between organizations. It depends on the relationships between the organizations, how openly they are willing to expose their risks to partners. Both the clients organizations' own experiences as well as the experience from the service provider should be considered when the probability of a risk factor is determined [Hallikas et al 2004]. However, the potential consequences should be assessed from the viewpoint of the independent organization. That is because an event or change which is harmful to one organization in a network or partnership, may have no or positive effects to another organization in the same network/partnership. It is important that single organizational risk management processes are completed by a collaborative process. A suggestion for such a risk management process is presented in figure 12 below.

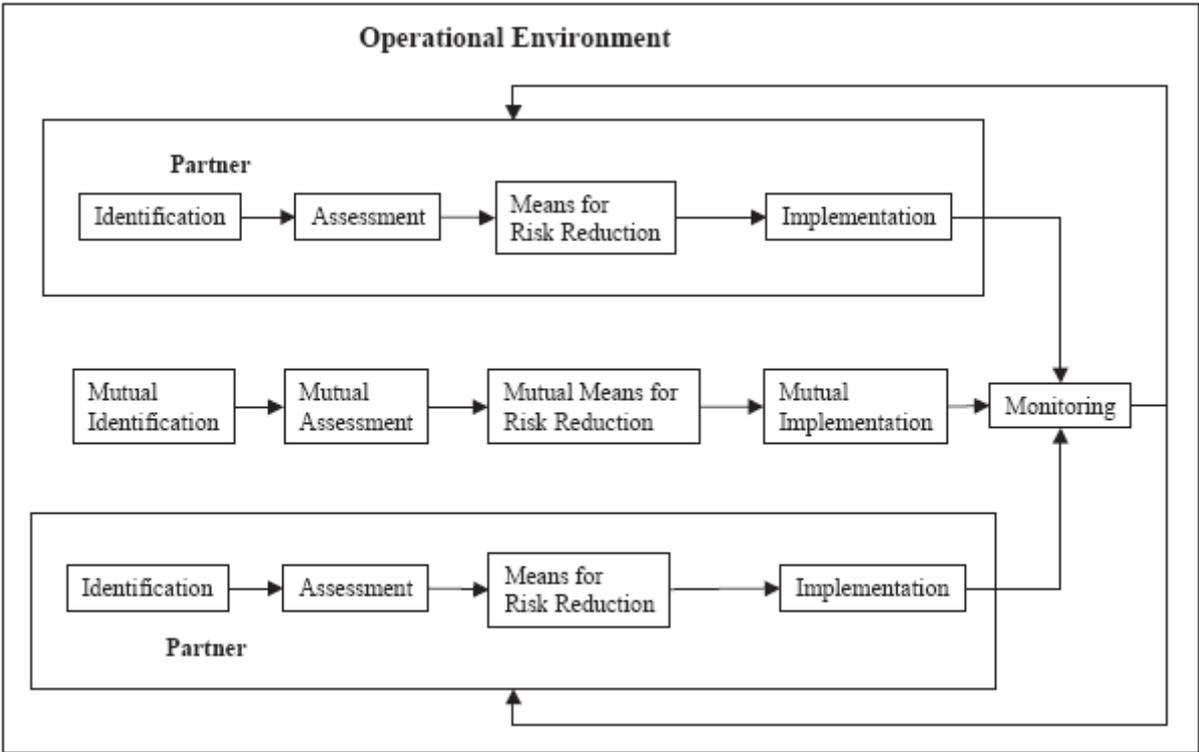


Figure 12: Collaborative risk management processes in networks [Hallikas et al 2004]

The collaborative risk management process starts with the mutual identification. It is the objective to identify and prioritize the risks that may have an impact on the success of the overall project. It is necessary to identify all risks that might significantly affect the goal of the whole network or other organizations operational capability [Ritchie & Brindley 2007; Hallikas et al 2004]. This mutual risk management process requires the identification and evaluation of common goals. This is also as a basis for a common network risk management strategy. Collaborative risk management creates the possibility to come up with risk management actions that may be too expensive to be implemented by a single organization, but worth investing in for the network [Hallikas et al 2004]. Besides, mutual risk reduction includes co-operative risk sharing. Mutual risk monitoring includes a common analysis of risks that have occurred earlier or, an analysis of changes in the common environment. Often, only the financial consequences (costs) are considered as the essential loss factors from the organizations' point of view. However, immaterial consequences such as trust, reputation and degradation of knowledge, which are hard to convert into monetary value, but which may cause financial losses in the long run should be considered important as well [Ritchie & Brindley 2007; Hallikas et al 2004].

The need for collaborative KPI's between client organizations and service providers is obvious, because the outsourced services can be considered as part of the own but extended organization [Van de Vet & Hajdasinski 2009].

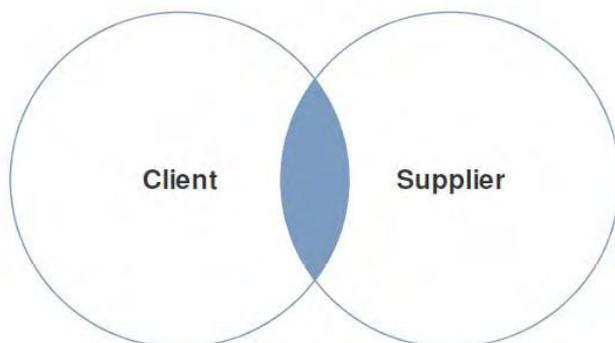


Figure 13: The extended organization [Van de Vet & Hajdasinski 2009]

In this context both organizations should emphasize joint objectives, management commitment and focus on added value (instead of “them and us” silo-thinking) [Van de Vet & Hajdasinski 2009]. In case both organizations reach a mature level of collaboration we can speak of a true strategic partnership.

The collaborative KPI's should be set on several levels: strategically, tactical and operational [Bojanc & Blazic 2008]. Setting those collaborative KPI's requires a lot of effort and transparency: e.g. joint objectives, optimizing metrics and monitoring of KPI's. It will require a substantial insight in short term and long term business objectives, state of the organization, supporting services, IT facilities, market and regulatory constraints etc. It means that performance measurements will depend on many constraints present by as well the client organizations the service provider [Van de Vet & Hajdasinski 2009]. As illustrated above, such KPI's will be a subset of KPI's holding for both sourcing out and sourcing in organizations. This also means that KPI's will have a dynamic character and during transition and transformation phases might migrate or change depending on the progress [Van de Vet & Hajdasinski 2009].

Before the client organization and service provider set up a collaborative risk management process, they should identify and align their own risk management practices [Bojanc & Blazic 2008; IACCM 2008]. In order to determine their own risk maturity profile, organizations can make use of an existing model from the IACCM [2008]. This model identifies four levels of organizational competence in the area of business risk management: Novice, Competent, Proficient and Expert. The model defines competences in terms of the organizations' approach against four attributes: Culture, Process, Experience, and Application.

	Novice	Competent	Proficient	Expert
Culture	<ul style="list-style-type: none"> - Risk averse, - Lacking awareness / understanding - Lacking strategy - Lacking commitment 	<ul style="list-style-type: none"> - Inconsistent - Some understanding / awareness - Reactive approach 	<ul style="list-style-type: none"> - Prepared to take appropriate risks - Good understanding of benefits across most of organization - Strategy mapped into process implementation 	<ul style="list-style-type: none"> - Proactive - Intuitive understanding - Belief, full commitment to be the best
Process	<ul style="list-style-type: none"> - Where present tend to be inefficient informal, ad-hoc 	<ul style="list-style-type: none"> - Inconsistent - No learning from experience - Standard approach 	<ul style="list-style-type: none"> - Consistent approach but scalable - Tailored to specific needs 	<ul style="list-style-type: none"> - Adaptive - proactively developed - Fit for purpose
Experience	<ul style="list-style-type: none"> - None; nothing relevant 	<ul style="list-style-type: none"> - Basic competence 	<ul style="list-style-type: none"> - Formal qualifications 	<ul style="list-style-type: none"> - Extensive experience - Externally recognized high competence
Application	<ul style="list-style-type: none"> - Not used 	<ul style="list-style-type: none"> - Inconsistent – major projects only. - Process driven - Inadequately resourced 	<ul style="list-style-type: none"> - Consistently applied - Adequately resourced 	<ul style="list-style-type: none"> - Proactively resourced - Across entire business - Flexible

Table 3: The IACCM Model [2008]

The IACCM model is provided in combination with a questionnaire. Organizations can use the model as a tool to identify their current level of maturity against a number of criteria and to set realistic targets for improvement, and measure progress towards achieving them. It is stated that *Novice* organizations typically have all the attributes in the framework at the lowest levels. Their culture is unaware of the need for formal risk management and it therefore follows no processes in place to deal with it. A novice organization has no experience in managing risk and there is no process to be applied. *Competent* organizations recognize the need for risk management. The evidence of this recognition is shown in the organization's culture, the existence of a formal process, its application and the accumulation of experience. Most organizations will be satisfied when they reach the third level, *Proficient*, where management of risk is routine and consistent across all projects [IACCM 2008]. The model identifies a final, *Expert* level of maturity where a risk-aware culture drives the organization into proactive risk management. An expert organization seeks to gain the full advantages of employing the best risk management processes. It is assumed in this research that 'novice' or 'competent' client organizations are not able yet to participate in collaborative risk management, because they will not be on the same page as the service provider. Novice organizations are risk averse, while outsourcing is a business strategy that contains risks. Furthermore Novice risk organizations lack risk strategy and commitment while outsourcing requires commitment from top management and a clear strategy. Competent risk organizations do not learn from past experiences. Outsourcing is ongoing relationship, thus requires learning from experiences. Besides, competent risk organizations have inadequately resources.

An asymmetry of power and knowledge appears to exist in the outsourcing market [Komporozos-Athanasiou 2007]. The conventional view on this asymmetry suggests that it is in favor of the client organization. The conventional view proposed that the client organization is in control and is driving and designing the outsourcing deal. This should result in increased benefits for the client organization. Komporozos-Athanasiou [2007] states that client organizations lack expertise and self-understanding. As a result, they will not be able to benefit from this control. In effect, the asymmetries function is in favor of the service provider who assimilates knowledge and expertise [Komporozos-Athanasiou 2007]. A typical outsourcing contract includes a maturity certification requirement for the service provider. Such third party validation, forced by the client organization and often paid by the service provider, typically involves capability maturity model (CMM) type assessments offered by organizations such as Accenture, TPI, and PricewaterhouseCoopers. Major service providers hold certifications that appear to assure risk reduction for client organizations and, therefore, increase the probability of a correct solution being delivered. Through the process of third party certification, client organizations force an increase of knowledge on the part of the service providers. Looking at the outsourcing service provider side, there is currently no form of third party validation of skills, self-knowledge, and maturity, which is similar to the mentioned provider-focused CMM type assessments. Komporozos-Athanasiou [2007] state that a client-focused maturity assessment mechanism can be greatly facilitative in tackling the outsourcing market asymmetries.

5.5 Summary

Client organizations indicated that there is still potential to improve IT-outsourcing relationships. Outsourcing implies a change in the business processes and procedures. As a result the fastest and easiest routes to change are closed due to the formalization of processes. Client organizations and service providers should not ignore the decrease of performance and satisfaction, but should try to actively manage this. Therefore, the client organization and service provider should improve their relationship. The transition from a client-supplier relationship to a so-called outsourcing partnership requires the necessary changes and conditions [Gottshalk & Solli-Saether 2006]. Many client organizations experienced difficulties in forming and managing a successful outsourcing relationship with the service provider [Gottshalk & Solli-Saether 2006; Outsourcing performance 2008]. The strength of a successful partnership is that it enables both organizations to achieve the organizational goals and builds a competitive advantage that each organization could not easily realize by itself [Palm 2001; Kern 1997]. As outsourcing models evolve towards partnerships, so should the risks factors and risk management. The need for collaborative KPI's between client organizations and service providers is obvious, because the outsourced services can be considered as part of the own but extended organization [Van de Vet & Hajdasinski 2009]. High partnership quality may be a necessary condition for outsourcing success, but it is no guarantee for success and it might not always be relevant. For example, if it is the objective of the client organization to reduce the IT costs, but the service provider failed to meet this objective, such an IT-outsourcing project would be a failure regardless of the partnership quality between the two organizations.

Chapter 6- Empirical research

6.1 Introduction

The theoretical chapters provided insight into the outsourcing process, the risk factors and risk management and in the relationship between the client organization and service provider. In order to answer the main research question, the following issues will be examined in the empirical research: (1) How do the client organization and service provider give interpretation to an outsourcing project? (2) Which risk factors are considered as most important by the client organization and service provider and how do they manage these risk factors? (3) What is the importance of the relationship between the client organization and service provider and how much do both parties invest in the relationship?

Outsourcing professionals from a client organization (ABN AMRO) and a service provider (Capgemini) have been interviewed in the empirical research. The empirical research focuses on large organizations because it is assumed that large organizations have the best developed risk management activities, more experience in IT-outsourcing and have the right organizational maturity to cooperate more closely with their outsourcing partner. Interviewing these two organizations leads to different perspectives regarding IT-outsourcing risks and collaboration, and increases the quality of the results. It is assumed that experienced senior outsourcing professionals, which bear managerial responsibility, have more added value for this research than inexperienced outsourcing juniors. The number of experienced senior outsourcing professionals, who have time and are willing to cooperate in this research, is however limited. The number of respondents may be small, but the interviewed respondents self are of great value for this research. The respondents have an extensive knowledge of IT-outsourcing, experienced different IT-outsourcing projects themselves and are now responsible at a strategically level for IT-outsourcing projects.

This chapter presents a brief presentation of the participating organizations and the respective interviewees. Paragraph 6.2 presents the results of ABN AMRO. Paragraph 6.3 presents the results of Capgemini. Paragraph 6.2 and 6.3 discuss the following subjects: a case description, the outsourcing process, the most important risk factors and the collaboration with their partner. The outcomes of both organizations are compared in paragraph 6.4. Paragraph 6.5 finally presents the summary of the empirical research.

6.2 Client organization: ABN AMRO

ABN AMRO is a Dutch bank, currently owned by RFS Holdings B.V., a consortium of Royal Bank of Scotland Group, the Government of the Netherlands, and Banco Santander. The bank was created as the result of the 1990-91 merger between Amsterdam-Rotterdam (AMRO) Bank and ABN, whose history dated back to the founding of the Dutch Trade-Company (*Nederlandsche Handel-Maatschappij*) in 1824. Between 1991 and 2007, ABN AMRO was one of the largest banks in Europe and had operations in about 63 countries around the world. In the biggest banking takeover in history, a consortium comprising RBS, Fortis and Banco Santander acquired ABN AMRO in 2007. Due to the financial crisis in 2008, the Dutch government nationalized the divisions owned by Fortis, while the UK government is now in effective control over the divisions allocated to RBS due to its financial bail-out of the Scottish bank. The process of integrating some of ABN AMRO's divisions into the new owners, and divesting others, is still in progress. In 2006 ABN AMRO counted more than 4500 locations in 63 countries, had 110.000 employees working for them, served 4.5 million client accounts and had a total stock exchange value of 56 billion euros. The interview is conducted with representatives of the Vendor Management Europe department of ABN AMRO, who are responsible for the IT-outsourcing practices of ABN AMRO.

In 2005 ABN AMRO budgeted 1.8 billion Euros for the next five years to outsource the majority of its IT-services, infrastructure and application development. ABN AMRO distinguished three important motives for IT-outsourcing. The motives are being classified in order of importance:

- 1) Increase the quality
- 2) Reduce the costs
- 3) Focus on the core business

Before ABN AMRO decided to outsource their IT, they already outsourced activities like security, catering and transport. In first instance, IT seemed less obvious to outsource because it is so intertwined in a lot of processes. ABN AMRO investigated several possibilities, but after analyzing these options they chose for an IT-solution that consists of in-house consolidation, partially outsourcing and off shoring. ABN AMRO entered into contracts with five IT-service providers with duration of 5 years. IBM received the largest part of the contract, worth of 1.5 billion Euros. IBM should manage the complete IT-infrastructure and got the responsibility over all data centers. The distinction was made between two kinds of processes: "Run the bank" and "Change the bank". This solution was worldwide. Infosys en Tata Consultancy Services will provide assistance in the area of *Application Maintenance (AM)*. AM contains the maintenance and finding solutions for problems. ABN AMRO selected five 'preferred suppliers' in India for the development of Applications (AD). These service providers can work against half of the costs price in Europe. Once ABN AMRO has an AD project, these service providers can offer their proposal. ABN AMRO can compare the proposals and selects the best service provider. ABN AMRO selected Verizon and KPN to manage the *Technology Network Services (TNS)*, this are telecom activities.

The complete outsourcing contract is very detailed and counts more than 7000 pages. In total approximately 4000 jobs were involved during the transfer. The choice for outsourcing has increased the quality of ABN AMRO's IT significantly. Especially the *Run the bank* activities are improved drastically because IBM has a lot of experience with similar data centre activities. In addition, ABN AMRO has less financial resources than IBM to invest in *Run the bank processes*. If ABN AMRO wants to invest in these processes, it can not spend this money on other activities. Furthermore, it is difficult for ABN AMRO to keep up with the rapid IT developments. Service providers like Capgemini, IBM and T-Systems stand in the middle of these developments and realizes themselves. In relation to the costs, the outsourcing plan worked according to plan. It is possible that ABN AMRO spends more money on their IT at this moment than before the outsourcing deal, but if the growth factor of IT is also taken into account, outsourcing is more beneficial to ABN AMRO. The service delivery flexibility of ABN AMRO has increased a lot. The infrastructure side of ABN can scale up within a month. This would have been impossible with their internal IT-department. Finally, the IT has become independent.

To manage and control the described case, a board of directors has been founded. This board exists of representatives of ABN AMRO and the different service providers. Usually, the representatives of ABN AMRO develop the main concept and functional design. Accordingly the service providers come up with solutions and applications. The service providers are limited by some regulations and should get the approval of their solutions under any circumstance. Because ABM AMRO outsourced their IT to multiple service providers, it can be difficult for them to find out where and what the cause of a possible problem is. It takes a lot of effort to find out which particular service provider is responsible for the problem and how to get that problem back at the desired service level. Therefore, ABN AMRO has outsourced this coordinating and monitoring role also to IBM. This role is called the *Guardian Role* and it means that IBM manages and takes care of each failure and maintains the contact with the related service providers. IBM communicates with a special Service Level Management department within ABN. They have the job to assess the provided delivery.

The Vendor Management department is the real owner of all the outsourcing contracts. They make sure that both ABN AMRO as well as the service providers comply with their obligations and stand in their rights. The position of Vendor Management is shown in figure 14. The Vendor Management department has an authorizing function. IBM and the other service providers are only being paid for their services when Vendor Management has signed and approved the activity. Having one authorizing party reduces the costs and improves the structure, simplicity and transparency

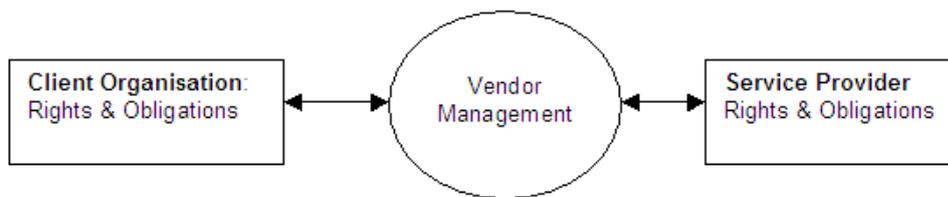


Figure 14: The position of Vendor Management

As a bank, ABN AMRO faces many different risks like, financial risks, compliance and regulatory risks, legal risks and reporting risks. The decision to outsource their IT has especially influenced their operational risk and reputation risk. Operational risks are the risks arising from people, processes, systems, physical assets and external events. Reputation risk is the risk of potential losses arising from a negative public opinion. It is for a client organization very important to understand what the consequences of outsourcing are. It is inevitable that things will change within the own organization, but also for the clients of your organization and other possible partners. Due to the outsourcing process, client organizations could be limited in their business and it is important that these changes will be communicated correctly and in time. The employees that remain to work for the client organization should not only consist of IT-specialists. IT-specialists may be inclined to interfere too much with the content of the provided IT-service instead of the managerial aspects. The retained organization should have more knowledge about managerial issues and relationship management. The client organization should realize that it can take up to two years before all processes of the client organization and service provider are aligned. Furthermore, it is important to be aware of the organizational and cultural differences. Organizations should look for consensus, otherwise there is a reasonable chance of tensed relationships.

Other risk factors are related to the outsourcing contract, especially in the data gathering process and the identification of the costs. In the data gathering process client organizations determine what they want to outsource in numbers and users. It is common in this process that certain activities are being forgotten with the consequence that the description in the contract is not complete. An other important issue in a contract is the question how detailed the provided services should be described for the service provider and till what level the client organization wants to monitor these services. A too detailed description results in the fact that there is no room for improvement. Client organizations should prevent contractual indistinctness. It should be clear what the meaning is of all points in the contract and why these points are mentioned. The final risk factor is contract management. Contracts often disappear in a drawer with the consequence that nobody in the client organization pays any attention to the content. Many client organizations own a lot of systems and applications that are almost not being used anymore. The contracts of these applications are often being extended in silence. Client organizations should identify and structure all systems and applications and collect all current contracts. If this information is being monitored, the client organization could reduce their costs.

A key component of risk management is ensuring that ABN AMRO's reputation is preserved and enhanced through choosing to engage responsibly in the right business activities with the right partners. ABN AMRO has implemented a combination of advanced and standardized approaches for credit, market and operational risks. ABN AMRO's risk philosophy is about the establishment and execution of bank wide criteria for the acceptance, monitoring, control and management of risk. ABN AMRO realizes this philosophy by proper risk identification and assessment at all levels in the organization. The risk tolerance level is set by the Managing Board in accordance with the Group Strategy. ABN AMRO looks for clarity and transparency. The risk decisions should be clear and consistent with strategic business objectives. Risk decisions are based upon the appropriate risk-reward balance. The case description of ABN AMRO described how they also outsourced a part of the risk management by creating the Guardian Role. However, this role is focused on the operational processes.

ABN AMRO experienced from day 1 that there is a natural tension between the client organization and the service provider. ABN AMRO wants maximum result from each euro invested, while the service provider wants to maximize their profit margins. An other factor that negatively influences a successful relationship is the phenomenon of moving problems from one organization to the other. The client organization might want to transfer their troubling IT-systems to the service provider, but by doing so, they will only hurt themselves. If the client organization is not able to structure their own IT-systems, than they are certainly not able to manage a service provider. Client organizations should learn to structure their own IT-organization before they start outsourcing. Both organizations should realize that 'human' aspects get involved.

Partnership requires openness and honesty, but both organizations should behave professionally towards each other. For example, the service provider should be able to professionally correct the client organization, without negatively harming the relationship. ABN AMRO claims that a majority of the outsourcing deals are based on price mechanisms. To move to a partnership, the two organizations should look for mutual beneficial, or win-win situations. ABN AMRO illustrates this statement with the example that the cost savings, realized due to outsourcing, will be split among both parties. In this way, IBM can spend this money in investing and optimizing the IT-development, while ABN benefits from the improved quality and cost reductions. ABN AMRO realizes that it is difficult to start a partnership with a new service provider from the starting point. A proper relationship requires time and experience. After a period of time you can notice if the circumstances are right to create a partnership. Little indicators can show what the potential is for a partnership, like help to repair last-minute errors. In such a way you can feel if the other party is willing to help and invest in your organization.

6.3 Service provider: Capgemini

Capgemini N.V. is the holding company of the Capgemini enterprises in the Benelux. The core activities from Capgemini are consulting-, technology- and outsourcing services. Furthermore they provide on small scale interim management and marketing consultancy services. Capgemini N.V. is a part of Capgemini S.A. This is an organization with 91.000 employees, which is active in more than 30 countries and realized in 2009 a turn over of 8.7 billion euros. The first interview was with an Outsourcing Service Sales Manager who is in charge of winning new client organizations for Capgemini and maintaining current relationships. The second interview was with a specialist in risk management who is in charge of identifying potential risks to secure the long term business continuity. Capgemini N.V. itself realized in 2008 a net turnover of 954.0 million euros and counted 8000 employees. Table 4 shows how the turnover is divided among the different core activities.

	x million euro	% of total turnover
Consulting services	108	11 %
Technology Services	621	65 %
Outsourcing services	211	22 %
Other	12	2 %
Total	954	100 %

Table 4: Turnover Capgemini N.V.

According to table 5, the outsourcing services prove to be an important business activity for Capgemini N.V..Capgemini responds to the business needs of client organizations and is able to take the total or partial responsibility for the management of IT-resources. Capgemini offers a spectrum of services, including applications management, business process outsourcing, infrastructure management and transformational outsourcing. Capgemini applies a flexible outsourcing approach. Contracts may vary in conditions and are being adjusted to the needs of the client organizations. For example, they can focus on both rapid cost reductions and transformational contracts which deliver added value. Capgemini claims that cooperation is the key to success. For example they evaluate in cooperation with the client organization the risk portfolio, business drivers and needs for change.

Capgemini manages outsourcing contracts with values varying from 100.000 Euros till several 100 millions euros and an average duration between the 3 and 7 years. Recent market trends show that the size and the complexity of the outsourcing contracts are increasing. Factors that stimulate these trends are the International Delivery (almost no activity is being performed within the Netherlands anymore) and Multi Vendor Outsourcing. Client organizations choose more often to work together with multiple service providers, so the service providers themselves have to work together with each other. An IT-outsourcing trajectory can from a selling perspective be divided in 4 phases. The first phase is the sales phase, in which the service provider is trying to sell its services to a client organization. The second phase is the contract phase, in which the exact wishes and demands are being aligned with the provided services. The third phase is the transition phase to the new desired state. The fourth phase is the actual delivery in which the processes should be operational and managed. Service providers prefer to deliver a standardized product/service to the client organization, which eventually could be extended with additional options. In this way they can benefit from economies of scale on which their business model is based on.

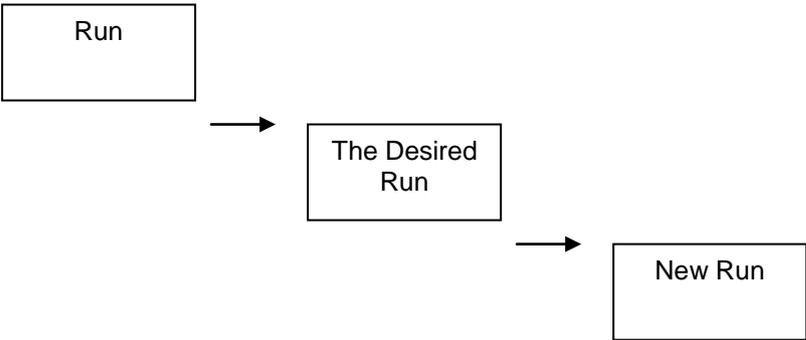


Figure 15: Process towards new run

The offered services can differ in complexity. Figure 15 on the previous page shows three different situations for the client organization: the 'run' phase, the 'the desired run' phase and the 'new run' phase. The current IT state of a client organization is defined as the *run* state. In this situation different and multiple systems and applications work together. The easiest activity for a service provider is to implement and control a certain application or system in the current *run* state. Things are becoming more complex when the client organization is willing to change its current run. This means that the client organization has a new image how they want to decorate and manage their IT-systems. It is a challenge to satisfy all stakeholders (management, operators and end-users) in this new run, because they have often contradictory interests. The current run is often an unstructured mix of different IT-systems and applications. It is the job of the service provider to structure and fix this to get to the new desired run. In advanced is it very difficult to get to a new run against a fixed price.

There are several risk factors that might endanger the outcome of this transformation. The sales perspective from Capgemini categorizes outsourcing risk factors according to the OPAFIT model, which divides risk factors in the following groups: *Organization, Personnel, Administration, Finance, Information, and Technology*. Organizational risk factors deal with choosing the right organizational structures to realize the objectives. Furthermore, the new organization should be controllable. The business ideas should be translated into concrete solutions and the organization should take care of demand management. Personnel risk factors deal with issues like motivation, continuity and knowledge retention. If the service provider wants to retain the knowledge and staff from the client organization it is important that in the early stages of an outsource project the employees do not feel discarded. It is important that management takes quick measures so that the qualified staff does not run away. In general, there are two types of employees during the transfer of people. The majority of employees like the new chances they get to develop themselves into the new company. The minority of employees can not deal with all the changes and differences in culture. These differences arise for example when employees have to move from government to multinational. Administration risks deal with issues like changes in invoicing and billing. Because the service provider takes over the activities, the client organization should decorate and adjust these activities. The most important financial riskfactor is the fact that client organizations want to sit at the front row, for the lowest price. This is however impossible. This results in the attitude from 'Penny wise, Pound foolish' ("cheap solutions are bought expensive"). Information risk factors mainly deal with the issue what information both organizations need to monitor the quality of the provided service. It is important to think about what the client organization wants to receive in terms of reporting and SLA's. Technology deals with the issue of choosing for 'state of the art' technologies or proven technologies. Service providers often chose for proven technologies, but it depends on the motive behind the outsource decisions

The risk management perspective from Capgemini states that miscommunication and mismanagement from the client organization form the main risk factors that endanger an outsourcing process. Operational end-users do often complain about a lack of participation and are dissatisfied, while strategic management is satisfied because the outsourcing deal realized cost savings. These internal contradictions do not match and make the work for the service provider even harder. A second problem originates from unclear distribution of the responsibilities. On a regular basis, service providers are saddled with responsibilities on which they could have no influence on. It might happen that certain SLA's or maintenance contracts, which are no part of the service providers responsibility, do influence the provided service. A third problem is the fact that not everything is put on paper. This restrains a proper transfer. For example people do not know or remember why certain choices are made. Because outsourcing projects are becoming so big and complex, it is imaginable that people lose the overview. A final risk factor is the urge of service providers to win outsourcing contracts. Often they make high promises, which are very difficult to realize. Furthermore, they are not always critical enough towards the client organization. All in order to win the outsourcing contract. As a result, service providers do often not have a clear view of the available IT-structures, assets and systems.

In general, the role of risk management can be described as identifying and reducing problems and complexity by looking for alternatives. Capgemini has, on the project side, an explicit risk management department that performs risk management all day. In the early stages of the outsourcing trajectory, risk management can proactively contribute to identification and management of risk factors. In the later stages, risk management gets a more corrective character. It is important to realize that there will always remain some degree of rest risk. Risk management is a continuous process. It is the ultimate goal to keep the risk level accepted. The risk management department has the power and influence to take certain decisions or to cancel projects. The risk management department works next to other departments like Sales, Marketing, Finance and Delivery. An outsource project team is always multidisciplinary. It is logically that these different members have different and sometimes contradicting interests. These differences are usually being resolved by means of discussion and conversations. Exchanging thoughts between departments is very crucial because this leads to new insights and alternatives. The risk factors are being identified by checking 40 questions. These 40 questions are first being checked in the sales phase and later also in the delivery phase. By means of quality gates different moments of time the performance and compliance the contract and risk factors be monitored.

Preferably Capgemini would like to build a business case together with a client organization and collectively determine a strategy. Capgemini admits that risk management should ideally be performed together too. However, this seems very difficult to realize. Capgemini claims, based on their experience, that client organizations do prefer a client-supplier on the basis of price, rather than a partnership based on trust and sympathy. For example, instead of the attitude of pushing through troubles and risks to the other party, the organizations should focus on mutual solutions. Besides,

client organizations should trust the service provider that he is not charging too much money for his services, while the service provider should trust the client organization that is being transparent about his IT-structure and not hiding dead bodies in the proverbial closet. A partnership means collaboration and contains letting go certain activities and losing the direct control of these activities. Factors that stop these developments are political games, individual interests, business cultures and a lack of experience. Another problem that hampers collaborative risk management is the weak link between the business side of the client organization and the IT-department. The wishes of the IT-department are often poorly translated, or the business side does not know how it can make the best use of IT. To put it briefly, the 'supply' chain is far from streamlined and therefore the parties are not ready for collaboration in IT-outsourcing and risk management. In principle Capgemini is willing to start a very 'open' outsourcing relationship, but not every client organization lends itself for such a relationship. Capgemini is prepared to share all information with a client organization. An example is that they sometimes include a complete risk analysis when they send in a tender. In this way the client organization has full insight in all the risks and processes of Capgemini. Preferably, Capgemini would also like to receive complete information from the client organization, but that is difficult when the client organization does not have the requested knowledge.

6.4 Comparison interview data

The results of both interviews are compared in table 7 below. The table discusses the results of several key subjects like the developments in de outsourcing market, satisfaction, performance, risk factors and others. The comparison table helps to draw conclusions which are mentioned in chapter 7.

	Client Organization	Service Provider
Subjects		
Developments outsourcing market	Client organizations focus on core business and choose for multi-vendor constructs	Size and complexity of delivery increases. Due to international delivery and Multi Vendor outsourcing.
Experience	Client organizations learned from trial and error. The understanding of outsourcing has improved.	Quality and perceived relation are important for client organization.
Desired state of IT-systems	Client organizations want standardized IT-systems that meet business requirements.	Standardized IT-systems enable the service providers to benefit from economies of scale.
Control	Client organizations find it difficult to let activities go. Multi-vendor outsourcing requires a party that manages and coordinates the different service providers.	
Outsourcing phases	<ol style="list-style-type: none"> 1) The decision to outsource 2) The selection of the service provider 3) The transition 4) The delivery 5) Contract termination 	<ol style="list-style-type: none"> 1) Sales phase 2) Transition phase 3) Transformation phase 4) Delivery phase
Most important risk factors	<ul style="list-style-type: none"> - Client organizations should understand consequences outsourcing - Wrong demand management - Poor formulation contract 	<ul style="list-style-type: none"> - Miscommunication and mismanagement client organization - Unclear distribution of responsibilities - The right organizational structure to realize objectives and control
Outsourcing Contract	Client organizations have no experience with contracting. Afraid of additional Costs	Not everything is put on paper. This restrains a proper transfer. People do not remember why certain choices are made.
Lock-in	No asset specificity makes it easier to change from service provider	Service providers are looking for profit and to make return on investments.

Insight in IT-systems	Client organizations might want to transfer their troubling IT-systems to the service provider, but by doing so, they will only hurt themselves. If the client organization is not able to structure their own IT-systems, than they are certainly not able to manage an IT-outsourcing project.	The urge of service providers to win outsourcing contracts often results in high promises, which are very difficult to realize. Service providers are not always critical enough towards the client organization. As a result, service providers do often not have a clear view of the available IT-structures, assets and systems.
Risk tolerance	Risk decisions of client organizations are based on the appropriate risk-reward balance.	Service providers realize that there will always remain some degree of rest risk. Risk management is a continuous process. It is the ultimate goal to keep the risk level accepted.
The outsourcing relationship	Client organizations experience tension between the objectives. They state that most outsourcing projects are based on price and not on trust and partnership.	Service providers accuse client organizations from: 'Penny wise, Pound foolish". Furthermore, they state that based on experience, client organizations are not looking for a partnership. The relation is based on price.
Cooperation	Client organizations realize that cooperation is necessary. It is however difficult to start a partnership with a new service provider from the starting point.	Service providers state that good cooperation with both the client organizations and other service providers is crucial to outsourcing success.
Asymmetry in power and knowledge	Client organizations have a dominant power position in the early phases of outsourcing. They have a lack of knowledge about the service provider. Possibility to get a third party verification to check skills service provider.	Service providers have a dominant position in the delivery phase of outsourcing. They have a lot of experience and knowledge. No possibility to get a third part verification to check skills client organization.
Close collaboration	Client organizations state that a good relationship requires mutual win-win situations and time.	Poor supply chain, political games, individual interests and business cultures make close collaboration difficult.

6.5 Summary

A large client organization and service provider have been interviewed to examine how these organizations manage IT-outsourcing projects and especially manage the risk factors collaboratively. The respondents provided a deep insight in the outsourcing projects and processes of the organizations. The interview results show that the experience, knowledge and performance of outsourcing increases. The results of both organizations are compared in paragraph 6.4 and this comparison forms the basis for the conclusions in chapter 7.

Chapter 7- Conclusions

7.1 Outsourcing

In the recent years, outsourcing projects have increased in size and complexity. Client organizations focus more on their core business and choose for multi-vendor outsourcing constructs to take care of their IT -management, -applications and -development. The related IT-activities upgrade from operational activities to more strategically functions. From a service provider's perspective, outsourcing becomes more complex due to the international delivery and the coordination of multi-vendor outsourcing. As a result, the management of IT-outsourcing projects becomes more difficult. Both the number of risk factors that negatively influence the outcome and process of IT-outsourcing increases, as well as their impact on the business performance. Although the complexity of outsourcing increases, so do the quality and the success rates of outsourcing. Research shows that the amount of outsourced activities will increase. Most of the client organizations expect that the quality of outsourcing will continue to improve as well. This trend is explained by cumulative experiences and rolling insights. The pioneers in outsourcing have extended their contracts once or twice, switched to another service supplier, or did back-source their activities in some cases. These developments in the outsourcing market support the need for an increased model of collaboration, in which client organizations and service providers share knowledge, risks and experiences in order to manage the risks and reduce the complexity.

By their nature, service providers have the urge to win outsourcing contracts. This results in high promises, which are very difficult to realize. Client organizations on the other hand, see outsourcing as the ideal way to transfer their troubling IT-systems and applications to an external organization. Client organizations are often not able to manage and structure their own IT systems. Service providers are in the sales phase not critical enough towards to client organization in order to win the contract. As a result, both the service provider and the client organization do not have a clear view of the available IT-structures, assets and systems, which makes the management of the outsourcing project very difficult. Collaborative risk management could not prevent this problem, because the two organizations have contradictory interests.

From a supply chain perspective, the client organization and service provider have a common goal in IT-outsourcing: the transfer and operation of a smooth well-functioning IT-system. It would seem logic that both the client organization and service provider would combine there information and strengths to benefit from a successful project. However, reality shows that the client organization and service provider remain two separate organizations. The client organization wants maximum result for each euro they invest, while the service provider is striving for a nice profit margin. This creates a natural tension and precludes collaborative risk management.

7.2 Client organization

Client organizations are becoming more experienced in outsourcing and have mostly learned from trial and error. A lot of client organizations are already in their second or third generation of outsourcing. This experience has led to an improvement in the understanding and management of IT-outsourcing projects. However, the theoretical and empirical research point out that there is still much to improve. Client organizations should get a more comprehensive understanding of the outsourcing consequences. A limited understanding of outsourcing results in wrong demand management and poor contracting. If client organizations are not able to structure their own IT-systems, than they are certainly not able to manage an IT-outsourcing project. The outsourcing plan should be communicated within the client organization. The perceived success of outsourcing differs a lot within the client organization. The management board is often satisfied with the performance of the service provider and the related numbers and costs reductions. However, the operational levels (employees) are less content with the outsourcing deal. The main causes of this dissatisfaction are sentimental reasons. The employees experience low benefits, are not willing to move to another organization and prefer the 'old' days before the outsourcing project better. A lot of risk factors that endanger the outcome and process of outsourcing originate in the client organization. Client organizations should therefore improve their individual project management, before they focus on collaborative activities.

As part of the project management, client organizations should perform risk management. Ernst & Young indicate that 20% of all client organizations do hardly perform risk management, 40% performs risk management on project level and 40% performs risk management on both project and organizational level. Only a small percentage (13%) of the client organizations creates a special department that communicates and manages the service provider. If client organizations do not have a certain degree of risk management maturity, they will not be able to collaborate with the service provider. The theoretical and empirical research point out that risk management is very important in outsourcing. Many of the risk factors in IT-outsourcing are similar to the risk factors in regular IT-projects. The risk factors in IT-outsourcing can be divided in 7 risk areas: *Financial, Human Resource, Governance, Transition, Delivery, Legal and Commercial*. These risk areas have a big overlap with regular IT-projects. The main difference is that IT-outsourcing has additional risk factors which are related to the viability and reputation of the service provider and to the management of the outsourcing contract. These two additional risk areas make collaborative risk management very difficult because the client organization and service provider have contradictory interests in these fields. The 7 risk areas of IT-outsourcing are presented in table 6 on the next page.

Risk Areas	Aspects
[1] Financial	- How does the business case look like?
[2] Human Resource	- What are the rights of the employees? (1st, 2nd, 3rd generation contracts)
[3] Governance	- Who is in charge? - Who has the responsibilities?
[4] Transition	- Change management
[5] Delivery	- How to monitor the SLA's?
[6] Legal	- Content and observance of the contracts
[7] Commercial	- Do you as a company want to associate with the client? - What is the viability of the service provider?

Table 6: IT-outsourcing risks

A second reason that precludes collaborative risk management is the fact that client organizations have difficulty in losing control and letting activities go. Client organizations may perceive that they are becoming too dependent on the service provider. If client organizations would also have to participate in collaborative risk management and share all their information, they may become even more vulnerable. Client organizations may be afraid that the service provider can take advantage of them. Therefore, client organizations are only interested in their own risk management activities and less in collaborative risk management.

7.3 Service provider

Most outsourcing projects have limited monetary value for the larger service providers. In these projects, larger service providers deliver a standard service without too much relational investments. However, in multi million euro outsourcing deals, service providers are willing to invest in the relationship with the client organization because of two reasons. First, the value of the contract is of significant importance to the service provider. Second, the reputation of the service provider is at risk. Huge multi million dollar contracts and reputation are two stimulating factors for more intense forms of collaboration.

Client organizations prefer to engage in long-term outsourcing deals. As a result, service providers have to adjust their business model to comply with these demands. Service providers must be sure that the client organization stays long enough with them to secure a profitable return on their investments. Therefore, service providers implement some 'tricks' to make it difficult for client

organizations to switch to another service provider. By doing so, the service provider can realize the profit margins. During the life cycle of IT-outsourcing, 20% of the costs are related to development and 80% is related to management and control. This means that there are numerous possibilities for the service provider to charge additional costs. The first trick is offering an attractive entry fee. The service provider might use an aggressive pricing strategy to convince the client organization. The service provider might be even offering their services below the cost price. The service provider could offer such a low price in the initial phase, because it would add other costs in a later stage. These costs were initially kept out of the original contract and will be charged at a higher price. An additional advantage of this strategy is that it makes it unattractive for other service providers to get involved. Another way to increase the profit margin is implementing penalty clauses. Penalty clauses ensure that the client organization pays for the development costs, made by the service provider, when they are switching to another service provider. Furthermore, the service provider could implement solutions that require training for the end-users of the client organization. The service provider provides these trainings. A final tactic to increase the profit margin is running necessary updates. The service provider is trying to keep these updates out of the contract. The switching costs should be that big, that it seems more attractive for the client organization to stay with their current service provider, despite the high additional charged service costs. These tricks are beneficial for the service provider, but are risk factors for the client organization. These tricks preclude collaborative risk management, because the service provider is not willing to share its profit model.

From a risk management perspective, collaborative risk management might have limited value for the service provider. Service providers have a well developed risk management department, have a lot of experience and maturity. In a collaborative risk management strategy, the service provider would probably be the front runner, without gaining much on their additional investments.

7.4 Relationship / Asymmetry

Most outsourcing projects are based on price mechanisms instead of relational factors. Client organizations are not looking for partnerships (or other intense forms of cooperation), but are mostly interested in the costs and quality of the service. However, both client organizations and service providers acknowledge that a good cooperation is crucial to outsourcing success. Cooperation in outsourcing requires openness and honesty. The empirical research shows that client organizations find it difficult to create and maintain a good relationship with a new service provider from the starting point. A proper relationship requires time and experience.

As an outsourcing project moves through its phases both the foundation of the relationship and the asymmetrical power position change. In the early phases of outsourcing, the service provider invests a lot of time and effort in the client organization, because the service provider is trying to win the outsourcing contract. Therefore, service providers invest a lot in the relational aspects. It is mentioned in the literature that the 'feeling' aspect plays a major role for the client organization to select a service provider.

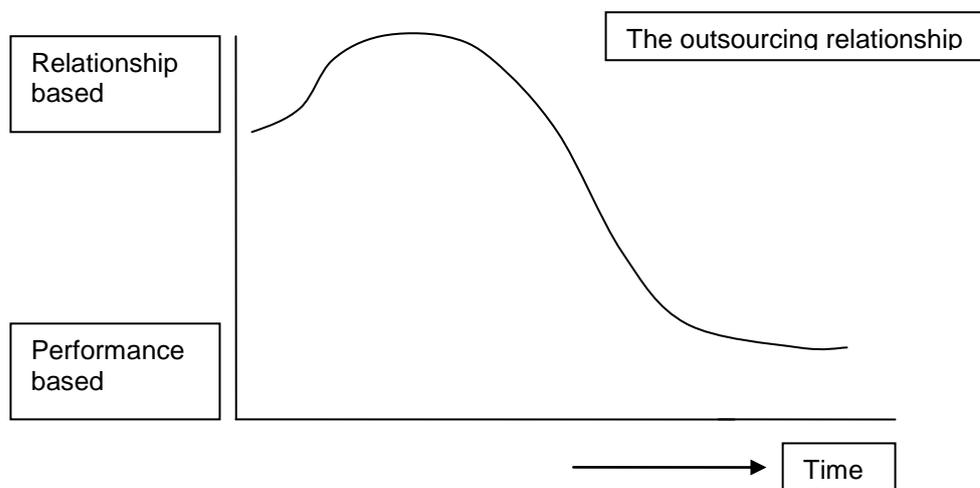


Figure 16: Changing relationship in IT-outsourcing

Once the service provider is selected, the transition phase starts. The relationship becomes more intense in this phase because both organizations have to communicate and cooperate how the outsourcing objectives can be realized. This phase is finalized by the conclusion of the outsourcing contract. The SLA's and KPI's that have been stated in the contract, ensure that the partnership changes into a more business oriented relationship. The relationship focuses less on human and feeling aspects, but instead on performance numbers, money and penalty clauses. A well defined complete outsourcing contract is therefore very important.

As the outsourcing project moves through the different phases, the asymmetry in power changes as well. The client organization has the most power in the early phases. The client organization is the one in the drivers' seat, because they have to select a service provider. The client organization can force service providers to share relevant information. Service providers have no power to force the client organization to share any information about their IT-systems and assets. Service providers can protect themselves against a client organization by asking for a verification period.

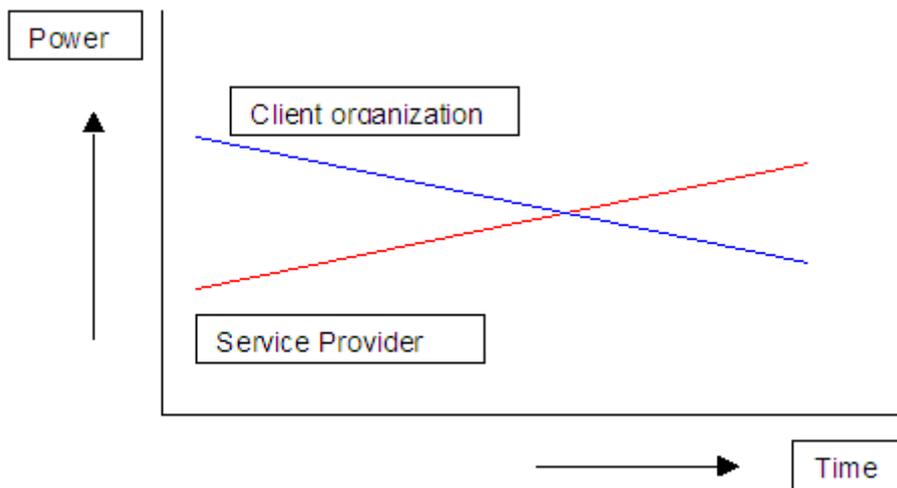


Figure 17: Changing power balance

The power asymmetry decreases in the transition phase because both organizations are collectively looking to design the delivery model. Once the organizations move to the transformation phase, the asymmetric power relationship favors the service provider because the client organization is becoming dependent on the performance of the service provider. The changing degree of power precludes collaborative risk management.

7.5 Summary

The main conclusions from this research project are that:

- Both the literature and empirical research indicate that there is still room for a lot of improvements in the client organization and the relationship with the service provider.
- The client organization and service provider remain two separate organizations, both looking to make profit. The service provider can not share its profit strategy with the service provider.
- Both literature and empirical research indicate that both organizations see the advantages of cooperation in outsourcing, in some degree. The management and realization of a relationship remains difficult,
- Most risk factors endangering the outcome and procedure of outsourcing are related to the client organization. Here lies to most potential to improve outsourcing results.
- An outsourcing deal should not only consist of operational, financial and relationship matters and the organizations respective obligations, rights and remedies. It should also prescribe a framework for dealing with unforeseen circumstances and managing change through the term of the agreement. Experienced legal counsel will appreciate these requirements, and be able to provide guidance and suggestions for how to ensure the agreement captures these elements at the appropriate level of detail

Chapter 8- Recommendations & Discussion

It is concluded that experience and expertise are crucial in the understanding and management of the outsourcing process. Client organizations that do not have any experience with outsourcing should therefore 'obtain' this experience and knowledge in some way. Client organizations could buy this knowledge from the service provider or consult other external outsourcing experts. Furthermore, client organizations should improve their project management skills. A lot of the risk factors in the literature and empirical research are related to the own project management capabilities. Top management should be committed, outsourcing plans and consequences should be communicated with all employees and the own IT organization needs to be identified and structured. Again, client organizations can make use of external project managers to improve these skills.

Client organizations should perform risk management as part of their project management. Performing individual risk management (for example on the basis of a checklist), should enable the client organization to identify a lot of potential risk areas. The strength of this checklist is that the risk factors are collected through extensive literature research and practical experiences. If the client organization makes use of this information, they narrow down the gap with the service provider. Based on the gained information in the risk analysis, the client organization can analyze how their own organization will react to outsourcing and all the pitfalls that are related to the service provider, including the outsourcing contract. This information allows the client organization to enhance their negotiation position with the service provider. Once the client organization is better informed, they are also better able to cooperate with the service provider. None of the organizations benefits from a troubled relationship in which the service provider has to pay penalty clauses and the client organizations receives large bills for additional activities. Therefore it is useful to communicate frequently and share related information. Both organizations should combine their strengths on project level.

It is concluded that collaborative risk management is not easily feasible in an IT-outsourcing context. Collaborative risk management would have been a useful tool when the demand organization and service provider were one organization. In that situation, collaborative risk management would be an effective tool to streamline and optimize the outsourcing process. Both organizations should consider pre-partnering arrangements to fully develop requirements specifications before entering into an implementation contract, as a strategy to minimize risk factors and benefit from the positive intentions. The pre-partnering approach enables both organizations to develop a clear understanding both of the complexities of the project requirements and of the likely performance of the other partner. Both client organization and service provider should use this opportunity to evaluate the other party's likely working style before making any major commitment.

Busi & McIvor [2008] conclude in their research that the generation of knowledge related to IT-outsourcing is dominated by specialized publications, blogs and outsourcing suppliers (the so called white papers). The scientific generation of knowledge specific to outsourcing is still at an embryonic stage compared to other disciplines like Supply Chain Management. Science is lagging behind practice, hence indicating little potential for knowledge transfer from science and education to industry, and a high risk of current theories lacking relevance for today's and future challenges. During this research the most recent sources of information have been consulted, because the behavior in outsourcing is subject to change. The explorative interviews in the early phase of this research helped to get the latest information and developments.

One of the most important limitations in the research is the low number of respondents in the empirical research. It was hard to find a large number of experienced outsourcing managers who were willing to talk about outsourcing failures. As a result, the empirical data could not be generalized. However, the data collection fits in objective of this research because it is an explorative qualitative research.

Even though numerous risk factors have been collected in the literature, combining various risk factors from various authors does not guarantee that all risk factors relevant to IT-outsourcing will be identified. Even sophisticated probabilistic risk assessments, used to develop accident scenarios for complex engineered systems, such as nuclear power plants, suffer from "completeness uncertainty", uncertainty about whether all significant phenomena and relationships have been considered [Sherer and Alter, 2004II].

During the realization of this thesis, it became apparent that there are several issues which certainly are worth studying in order to deepen the topic of IT-outsourcing, risk management and collaboration. Further research in this field could be of significant importance to organizations involved in, or planning to start an IT-outsourcing project. First of all, since the conducted study is a qualitative study of exploratory nature, it would be useful to conduct a complementary empirical research aiming at the revelation of statistical evidence for the results found within this research. By doing so, the value of the results obtained within this study could be increased. Furthermore, during the preparation phase of the empirical research it became clear that the size of an organization influences the complexity of internal IT processes and the collaboration. Therefore, it would be interesting to compare the results of large and small client organizations with different service providers. Most of the outsourcing studies focus on large organizations or large contractual arrangements involving amounts stated in the millions. Small and medium-sized enterprises (SMEs) are not, however, simply scaled back versions of their larger counterparts. Because most literature focused on large organization, so does the empirical data in this research. Furthermore, it is assumed that large organizations have better understanding of IT-outsourcing, more experience, and a higher degree of risk maturity. These factors were considered to be important for collaborative risk management.

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Appendix C: Overview Dutch service providers

Giarte performs every year a research among client organizations how they perceive their service provider. The main question in the research is to what extent client organizations are willing to recommend their service provider among colleagues. The scores of the research are listed in table 7 below. The scores in this research vary from the maximum 100 points for Accenture to 51 points for Getronics.

Service Provider	Satisfaction score
Accenture	100
Sogeti	97
Imtech ICT	95
Schuberg Philis	94
T-Systems	89
Centric	85
Logica	77
Fujitsu Services	74
Atos Origin	73
Capgemini	70
IBM Nederland	68
Ordina	67
HP/EDS	67
Getronics	51

Table 7. Overview scores Giarte reseach [Automatiserings Gids 2009]

Accenture scored 100% because client organizations stated they respond very adequately to changes. Getronics scored 'only' 51% because client organizations perceive that Getronics lacks focus and quality in the area of infrastructure.

Appendix D: Overview consulted outsourcing experts

Name	Organization
Guus Delen	Verdonck Klooster & Associates
Jan de Heer	KPN
Chris Verhoef	Vrije Universiteit Amsterdam
Phocas Savenije	Capgemini
Marco van der Vet	Capgemini
Kees Guijt	ABN AMRO
Achraf Talhaoui	Coppa Consultancy
Stephan Bals	Achmea
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Appendix E: IT-Outsourcing Checklist

The checklist is divided in four risk aspects:

- (A) Client organization
- (B) Service provider
- (C) Outsourcing contract
- (D) Performance & relationship

The client organization aspect consists of 28 questions. The service provider aspect consists of 23 questions. The outsourcing contract aspect consists of 12 questions. The performance & relationship aspect consists of 27 questions. It is the objective of the IT-outsourcing checklist to identify the risk factors mentioned in chapter 4 and to (collaboratively) think of measures to battle the identified high risk factors.

The checklist should identify if the client organization self is ready for IT-outsourcing. The drivers are based on the experience with the outsourced IT-activities, outsourcing itself and the mindset regarding outsourcing. Furthermore it should make the client organization aware of the relational aspects that are involved by IT-outsourcing and if the client organization is willing to make this relationship work. The relationship between client organization and service provider plays an important role in outsourcing success. Something will inevitably go wrong during the contractual period. A good relationship can help increase the outsourcing success. Finally the checklist should identify how the performance is being managed and monitored, and how the client organization can influence the performance. The client organization should for example not lose the control over outsourced activities. This includes the management of the project according to the agreed definition of success, a willingness to stop projects, accountability for results, and a connection to learning.

Client organizations can take several measures to battle the risk factors. Client organizations could consult external outsourcing experts to validate the outsourcing plan, strategy and outsourcing contract. Non experienced client organizations should learn to trust to the service provider in doing what they do best: providing the desired service. They should not interfere too much with the service provider's activities. Furthermore, client organization should create awareness within the organization that the service provider is a strategically partner of the client organization and is of value to the business. Therefore the client organization should invest in the relationship. Communication with the service provider is essential. Create for example special relation-ship managers, plan regular meetings and reporting, let the service provider benefit in cost reductions, provide access to all related business processes etc.

Client organization:

Service provider:

Date:

Risico aspects

	Client Organization	Service Provider	Outsourcing contract	Performance & Relationship
Number of questions	28	23	12	27
Max. Score	84	69	36	81
Factual score				
Score %				
Number of questions with score '3'				

Risk score

	Low	Average	High
Client organization			
Service provider			
Outsourcing contract			
Performance & Relationship			

Per question is the risk low by the score 1, average by score 2 and high by score 3.

Per aspect is the risk low by 0-25%, average by 25-75% and high by 75-100%

Client organization

Number	Description		Score
A.1	Is the client organization (end-users and management) experienced in the IT-activities that will be outsourced?	Very experienced Medium None	1 2 3
A.2	Does the client organization have experience with IT-outsourcing?	Very experienced Medium None	1 2 3
A.3	Does the client organization have experience with networking?	Very experienced Medium None	1 2 3
A.4	Does the client organization only focus on the price/cost of outsourcing?	No Limited Yes	1 2 3
A.5	Does the client organization realize that the service provider helps to add value to the organization?	Yes Limited No	1 2 3
A.6	Does the client organization have a detailed and adequate outsourcing plan?	Very detailed Medium No	1 2 3
A.7	Does the client organization have defined its IT-needs?	Very detailed Limited None	1 2 3
A.8	Has a termination strategy been defined by the client organization? (what to do when the outsourcing contracts comes to an end)	Yes, very detailed Limited No	1 2 3
A.9	Is it possible for the client organization to back-source (or re-insource) the IT-activities?	Yes, all activities Limited, some No, none	1 2 3
A.10	Does the client organization have clearly defined the innovation objectives stated in the outsourcing plan?	Yes, very detailed Medium No	1 2 3
A.11	Does the retained organization have the right capabilities (managerial skills) to manage the IT-outsourcing contract and the relationship?	Yes Medium No	1 2 3
A.12	Has the client organization thought about the (in)-ability to adapt to the new IT technologies?	Yes Limited	1 2

		No	3
A.13	Is there a positive attitude among the client organization to trust the service provider?	Yes Limited None	1 2 3
A.14	Is there a positive attitude among the client organization to trust the followed strategy?	Yes Limited None	1 2 3
A.15	Is the client organization open for new (or other) cultures?	Yes Limited No	1 2 3
A.16	Can complacency (<i>zelfgenoegzaamheid</i>) and ego, from top management, influence the outsourcing process? (this may result in the wrong motivations and choices)	Yes Limited No	3 2 1
A.17	Does the client receive reporting of the SLA's /KPI's?	Yes Limited None	1 2 3
A.18	Does the client organization have the discipline to provide the service provider with relevant information and keep him informed of internal development?	Yes Limited None	1 2 3
A.19	Are the expectations of all users (strategic, tactical, and operational) identified?	Yes Limited No	1 2 3
A.20	Is possible opposition from own staff identified?	Yes Limited No	1 2 3
A.21	Has the outsourcing plan been communicated with employees and stakeholders?	Yes Limited No	1 2 3
A.22	Is there an agreed definition of success? The definition of success should be widely understood and agreed within the client organization	Yes Limited No	1 2 3
A.23	Is it clear who is in charge of the outsourcing contract in the client organization?	Yes Limited No	1 2 3
A.24	Is there a clear cost-benefit relationship?	Yes Limited No	1 2 3
A.25	Has risk management been applied by the client?	Yes Limited None	1 2 3

A.26	Is the future position of the involved staff members clear and accepted by them?	Yes Limited No	1 2 3
A.27	Are the involved staff members willing to be employed by the service provider?	Yes Medium No	1 2 3
A.28	Are the qualifications of the involved staff members identified?	Yes Limited No	1 2 3

Service provider

Number	Description		Score
B.1	Are there multiple service providers on the market to serve the client organization?	Yes, a lot Medium, a few No, only 1	1 2 3
B.2	Do both cultures of the client organization and the service provider match?	Yes Limited None	1 2 3
B.3	Does the strategic level have a matching contact person within the organization?	Yes Limited No	1 2 3
B.4	Does the tactical level have a matching contact person within the organization?	Yes Limited No	1 2 3
B.5	Does the operational level have a matching contact person within the organization?	Yes Limited No	1 2 3
B.6	Does the service provider have enough room to manoeuvre? (flexibility)	Yes Limited None	1 2 3
B.7	Is the service provider approachable for the end user?	Yes Limited No	1 2 3
B.8	Does the service provider show customer intimacy?	Yes Limited None	1 2 3
B.9	Does the service provider show operational excellence?	Yes Limited None	1 2 3
B.10	Does the service provider show product leadership?	Yes Limited No	1 2 3
B.11	Has the outsourcing plan been communicated well with the service provider?	Yes Limited No	1 2 3
B.12	Are the qualifications of the service provider's staff identified?	Yes Limited	1 2

		No	3
B.13	Does the Service provider make use of reporting models that are client oriented?	Yes Limited No	1 2 3
B.14	Is it clear who is in charge of the outsourcing contract in the service provider organization?	Yes Limited No	1 2 3
B.15	Has risk management been applied by the service provider?	Yes Limited No	1 2 3
B.16	Are the motives behind incentives client oriented? (are bonuses related to winning clients or client satisfaction?)	Yes Limited No	1 2 3
B.17	Does the service provider have internal campaigns that invest in client orientation?	Yes Limited No	1 2 3
B.18	What is the financial viability of the service provider?	High Medium Low	1 2 3
B.19	What is the position of the service provider in the market?	Top class Medium Low	1 2 3
B.20	What is the size of the service provider?	Huge Medium Small	1 2 3
B.21	Does the service provider have experience and expertise with the activity?	Yes Limited None	1 2 3
B.22	Does the service provider have a positive track record in working well with other customers?	Yes Limited No	1 2 3
B.23	Does the service provider have a clear profile what shows which services belong to their specialties?	Yes Limited No	1 2 3

Outsourcing contract

C.1	Are the responsibilities clearly defined in the outsourcing contract? (The organization has to implement a strict and rigid division of labour between the service provider and itself)	Yes Limited No	1 2 3
C.2	Are there clear and complete liabilities in the contract?	Yes Limited None	1 2 3
C.3	Are there exit clauses in the contract?	Yes Limited No	1 2 3
C.4	Is there flexibility in the contractual provided service?	Yes Limited None	1 2 3
C.5	Is there flexibility in the contractual volume?	Yes Limited No	1 2 3
C.6	Does the contract manage ownership rights in technology to permit switching and other such provisions?	Yes Limited No	1 2 3
C.7	Does the contract manage the ownership of hardware, software and documentation?	Yes Medium No	1 2 3
C.8	Are the stipulations of the contract verified by lawyers and auditors?	Yes Limited No	1 2 3
C.9	Are possibilities foreseen for escalation in case of disagreement?	Yes Limited No	1 2 3
C.10	Has regular evaluation of the outsourcing contract been arranged?	Yes Limited No	1 2 3
C.11	Does the contract prevent the client organization from opportunistic behavior?	Yes Limited, No	1 2 3
C.12	Is it possible to re-negotiate the outsourcing contract?	Yes Limited No	1 2 3

Performance & relationship

D.1	Is there a clear definition for end-to-end management? process management, culture, and innovation? Be sure that you are talking about the same issues	Yes Limited No	1 2 3
D.2	Is there a clear definition for end-to-end process management?	Yes Limited No	1 2 3
D.3	Is there a clear definition for culture?	Yes Limited No	1 2 3
D.4	Is there a clear definition for innovation?	Yes Limited No	1 2 3
D.5	Is there consistent measurement?	Yes Limited No	1 2 3
D.6	Is there an identification and measurement of costs?	Yes Limited No	1 2 3
D.7	Is there an identification and measurement of benefits?	Yes Limited No	1 2 3
D.8	Is there a frequent user satisfaction test?	Yes Medium No	1 2 3
D.9	Does the client organization make use of the results?	Yes Limited No	1 2 3
D.10	Are new responsibilities introduced due to the transition?	Yes Limited No	3 2 1
D.11	Are new tasks introduced due to the transition?	Yes Limited No	3 2 1
D.12	Has the outsourcing plan been communicated well with the service provider?	Very detailed Medium No	1 2 3

D.13	Does the client organization provide the service provider access to the core of the business processes?	Yes Limited No	1 2 3
D.14	Will delivered benefits of the outsourcing deal be shared between client and service provider?	Yes Limited No	1 2 3
D.15	Has a relational dip been foreseen and have measures been taken to avoid this dip?	Yes Limited No	1 2 3
D.16	Are there common norms developed and secured that are relevant for both organizations?	Yes Medium No	1 2 3
D.17	Does the client organization integrate and exploit strategic IT-resources from the service provider with their own resources? (to support the competitive products and services)	Yes Limited No	1 2 3
D.18	Does the client organization pay enough attention to mutual KPI's? and the methods in which the related and required information is collected and shared?	Yes Limited No	1 2 3
D.19	Does the client organization pay enough attention to the methods in which the related and required information is collected and shared?	Yes Limited No	1 2 3
D.20	Is the available functionality changed by the outsourcing?	Yes Limited No	3 2 1
D.21	Are new hardware facilities installed?	Yes Limited, None	3 2 1
D.22	Is new software introduced?	Yes Limited No	3 2 1
D.23	Are new services introduced?	Yes, Limited None	3 2 1
D.24	Is a new helpdesk introduced?	Yes Limited No	3 2 1
D.25	Is there a match between the chosen technology and the outsourcing motive?	Yes Limited, No	1 2 3

D.26	Does the client organization have ongoing rights to audit and access data?	Yes	1
		Limited	2
		No	3
D.27.	Are there control-mechanisms to monitor the process evolution?	Yes	1
		Limited	2
		None	3
