

## MASTER

### IT outsourcing performance

is cost the factor that makes an IT outsourcing contract successful?

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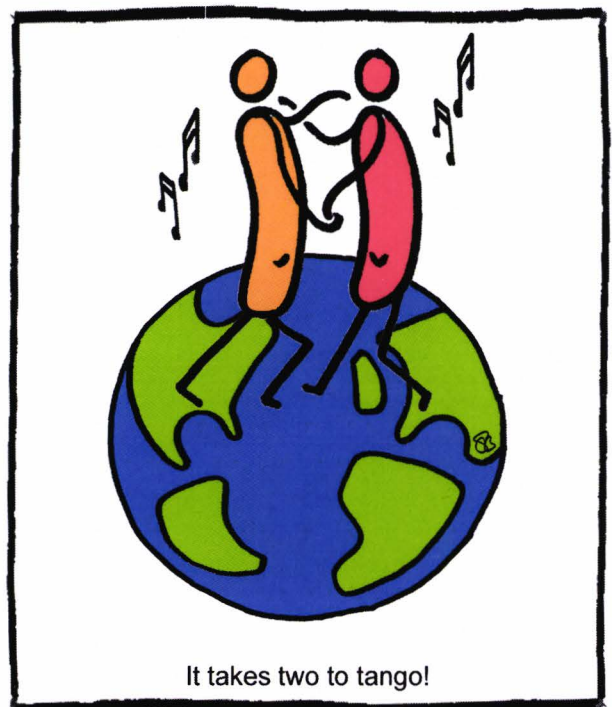
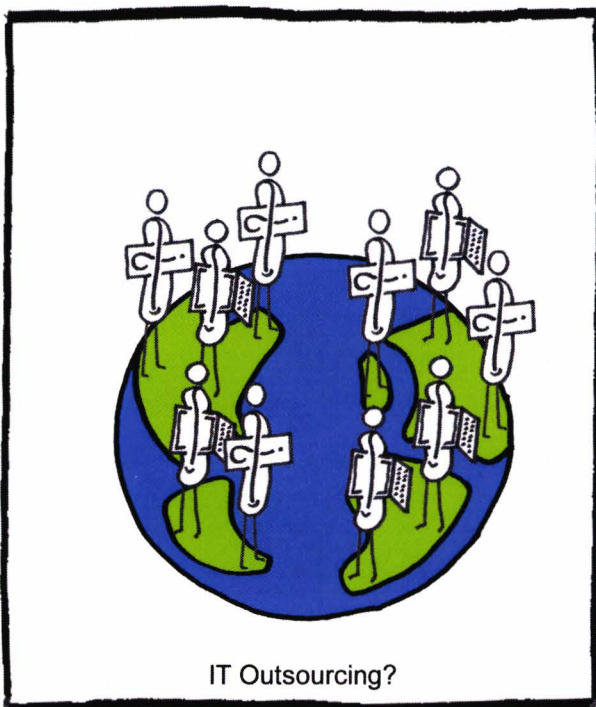
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# IT OUTSOURCING PERFORMANCE

Is cost the factor that makes an IT Outsourcing contract successful?



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## **Abstract**

This report describes the exploratory research of success factors that determine the success of IT services outsourcing contracts. A literature review and expert interviews have been performed to develop and validate a list of IT outsourcing success factors. The IT outsourcing success factor assessment framework has been developed. This framework has been developed into the IT Outsourcing Success Factor Assessment tool (ISFA). This diagnostic tool assesses IT outsourcing relations on the success factors in an early stage and while managing the process. The ISFA tool contributes to IT outsourcing success and prevention of failures.

## Executive summary

IT outsourcing or abbreviated ITO has been the subject of this project, specifically the success factors of ITO arrangements. ITO is still - seventeen years after the world-famous Eastman Kodak Co. deal - very actual. It is a phenomenon that will remain an essential part of world wide business. Examples of aimed ITO benefits that have stimulated the enormous growth since 1996 are lower cost, improved productivity, increased quality, higher customer satisfaction, time to market and the ability to focus more on core competences. During this growth not all ITO arrangements appeared to be successful. The question raised while observing this fact is why and what to do to prevent these failures? Reviewing existing literature has unfortunately not resulted in a clear answer to this question. Only little research has been found on the topic of ITO success factors in relation with performance (or failure). Outsourcing is not often evaluated in practice which clarifies that hardly any evaluation data is available. The available detailed evaluation data has been based on the known successful ITO arrangements. The failures could be considered as a loss of face which might impact business directly and are therefore not published. ITO involves a lot of money, which means that failures are resulting in a tremendous loss of money. The world wide ITO market in 2011 has been forecasted by Gartner to be \$318 billion. In an ITO market of this pecuniary size and hardly any failures that are evaluated this involves billions of dollars being thrown away. The huge loss of money resulting from ITO failures, the lack of evaluation of failures and only little literature research available have been the triggers for this project. Besides these facts the perceived unilateral way of evaluation is expected not to contribute to the success of ITO. While exploring existing literature related to these facts the main project question has been raised:

*'What are the key success factors that determine the success of IT outsourcing (ITO) contracts?'*

This report describes the exploratory research of success factors that determine the success of IT services outsourcing contracts. The list of IT outsourcing success factors has been analyzed from the literature review and semi-structured expert interviews. This list is a key component of the IT Outsourcing Success Factor Assessment (ISFA) framework that has been developed. This framework has been the basis of the ISFA tool. This diagnostic tool has been developed to assess IT outsourcing arrangements on the success factors in an early stage and in the process of outsourcing. This tool contributes to IT outsourcing success and prevention of failures. Three assessment phases have been defined:

*The individual evaluation* or 'default' evaluation is the first phase of the ISFA. The project default ranking of success factors is recommended as the IT services industry standard evaluation. The evaluation on ITO success factors of an individual will be assessed in the Architect phase. The default ranking is used to test the correlation of the individual evaluation with the industry standard. *The team alignment evaluation* is the second phase. The evaluation of all team members on the defined factors are assessed with the ISFA tool. The results of the ISFA should lead to a discussion to come to a team alignment in an ITO arrangement. The default ranking is used to test the correlation of the team evaluation with the industry standard. *The relation alignment evaluation* is the final phase of the ISFA. The source and the outsource organization(s) or teams are requested to provide their evaluation input. The analysis with the ISFA tool provides both graphically and statistically the results of the relation alignment or cultural fit on ITO success factors in the arrangement. Trust in a relation, willingness to share knowledge and the intention to invest in dedicated assets are examples of cultural fit aspects.

The developed ITO Success Factor Assessment (ISFA) tool provides the answer to the main project question. The project has delivered the structured list of the ITO success factors which is the key component in this tool. To determine the success of a contract or arrangement the success factors should be frequently evaluated by the ISFA tool. The assessment is always ITO arrangement specific, related to the phase of the arrangement and certainly has to be performed from a relation perspective: *'It takes two to tango!'*

## Preface

This report is a Master Thesis for the study of Industrial Engineering and Management Science at the Faculty of Technology Management of the Technical University of Eindhoven. It describes the exploratory research of success factors that determine the success of IT services outsourcing contracts. A literature review and expert interviews have been performed to develop and validate a list of IT outsourcing success factors. The IT Outsourcing Success Factor Assessment framework has been developed. This framework has been developed into the IT Outsourcing Success Factor Assessment tool (ISFA). This diagnostic tool assesses IT outsourcing relations on the success factors in an early stage and while managing the process. The ISFA tool contributes to IT outsourcing success and prevention of failures.

My personal objectives of this project have been to gain experience in conducting academic research, extending my knowledge of outsourcing and last but not least to obtain the Masters degree. These objectives have been realized in a beautiful journey of six months of research. The research has shown that detailed study can result in surprising outcomes. It has resulted in the extension of the existing literature and the IT Outsourcing Success Factor assessment.

The Master Thesis project has been conducted in cooperation with the Eindhoven University of Technology (TU/e) and Philips Electronics Nederland B.V. Therefore I would first like to thank my supervisors Prof. Dr. A.J. Van Weele and Dr. Drs. J.J. Berends for always providing very constructive feedback and support while developing this project. Their thorough knowledge of the research topic and research methodologies has definitely contributed to the quality of this project. Secondly I would like to thank my organization supervisor Drs. G. Behr for his constructive coaching along this journey. Your positive attitude and support has enormously contributed to realize the objectives.

Certainly I would like to thank the experts and my colleagues that I have interviewed during this research. We have agreed not to name you personally because of the anonymous set-up of this project. Your input has been an essential contribution. Thanks a lot for your time, information and (out) sourcing insight. Special thanks to SVP Mr. R. Savelkoul and VP Mrs. M. van Steenis for your time and constructive feedback in the reflection discussions.

Finally I would like to thank my family and friends for six years of support. The part-time study (evening and weekend) next to a full-time job has impacted the frequency of our 'socials'. Arne, Job and Roy thanks for the teamwork in various projects these years at the TU/e. Bert, my late uncle, thanks for everything. Thanks to my ('clean') parents for their interest and their support. But most of all, thanks to my lovely wife Sanne who has unconditionally supported me all the way. We have definitely achieved this together: "Leven is het meervoud van lef!"

Dear Sebastiaan and Olivier: "*pappa hoeft in het weekend niet meer te 'werken'!*"

Eindhoven, August 1<sup>st</sup> 2007

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*"Inkoop is een laboratorium waar je ogen en oren tekort komt en horen en zien je vergaan"*

*Prof. Dr. A.J. van Weele*

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## Abbreviations (frequently used)

BPO	Business Process Outsourcing
CIO	Chief Information Officer
CPO	Chief Purchasing Officer
HRM	Human Resource Management
ICT	Information Communication Technology
ISFA	ITO Success Factor Assessment
IT	Information Technology
ITO	Information Technology outsourcing
OLM	Outsourcing Lifecycle Model
(S)VP	(Senior) Vice President



# 1. Introduction

## 1.1 Orientation

In a primitive village several thousand years Before Christ every family made its own pots, spears and arrows and hunted and gathered its own food. Some people were naturally more skilled at certain of these tasks than others. These people began to concentrate on their core competences (phrase from Prahalad and Hamel, 1990). Such a competence is for example weapon making. The other things these people used to do they began to outsource, such as hunting. The people bartered their knives spears and arrows for the things they no longer produced. Later the money became the medium of exchange, but the principles of modern outsourcing can be said to have their roots in the recognition that there were economic benefits in specialization.

In today's global economy, outsourcing has become a common phenomenon. International organizations are involved in strategic decision making on processes that consider contracts of Information Technology Outsourcing (ITO). Factors like lower cost, improved productivity, increased quality, higher customer satisfaction, time to market and the ability to focus more on core competences are examples of benefits of outsourcing contracts. However there are many challenges and risks associated with ITO (Dahr and Balakrishnan, 2006). The challenges and risks of outsourcing have been subject to various researches. *Why* outsource is not the only question that has to be answered. The next questions of great importance are *what* and *how*, to be able to prepare a successful ITO contract.

Outsourcing has grown enormously since 1996. Going back a couple of years the Outsourcing Institute stated that outsourcing in the United States has become a 'standard business practice'. The amount of outsourcing in the United States captured about 340 billion dollar in 2000. The expectation at that moment was a growth of fifteen percent per year. The outsourcing Europe index shows that 71 percent of all outsourcing in 2006 in Europe have been ITO related (Figure 1.1). According to the Outsourcing Institute, ITO has fulfilled a leading role in the overall outsourcing revolution. The Y2K (year 2000) problem and the Internet-bubble are examples of ITO accelerators. Outsourcing was presented as the attractive alternative for a sustainable IT environment. For the organizations that were exploring the IT solutions, this alternative would resolve the challenges that these organizations internally did not have the resources or skills available for.

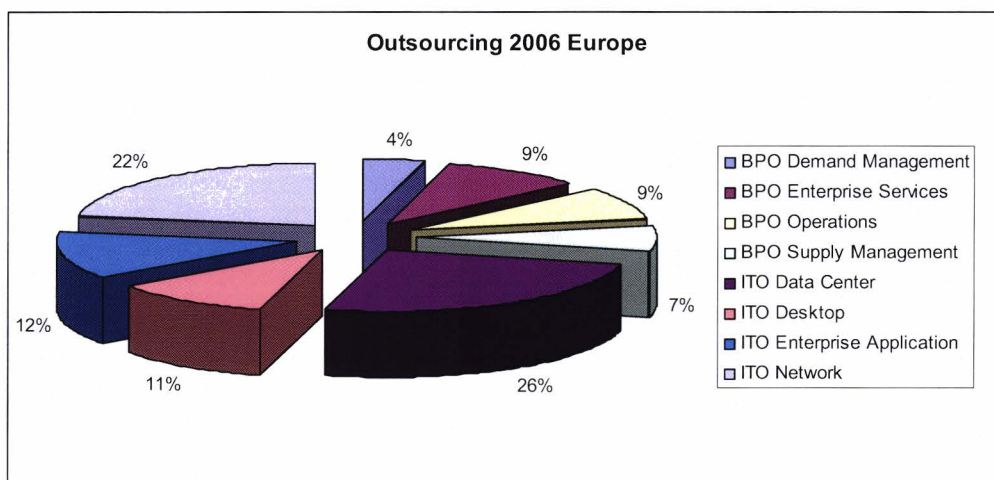


Figure 1.1 Outsourcing index 2006 in Europe (source Gartner Dataquest, 2007)

Information from a Gartner study, conducted in 2005, placed global ITO at \$207 billion in 2005 and forecasted this to grow to more than \$318 billion in 2011 (Figure 1.2). Outsourcing has grown beyond the domain of IT decisions, such as where and how to source IT to a much wider set of business functions. ITO led with 67% of all global outsourcing deals in 2004 that were related to IT (Souza et al., 2004).

The trigger for this exploratory project has been based on two reasons. The first reason is that it has been noticed that ITO contracts are not guaranteed to be successful. Frequent publications on terminated deals, problems with service quality and high cost of outsourced services are examples that have confirmed this (see example in Annex F). Outsourcing consultancy research has stated that not all outsourcing contracts bring the expected benefits or goals (e.g. Gartner, Accenture). Research from Lacity and Hirschheim states: 'Although suppliers were consistent in the way they contracted and governed, the main differentiator between success and failure was the individual leading the supplier account team' (Lacity and Hirschheim, 1993). Another example from literature is the question "why does the outsourcing of IT frequently fail to produce the expected cost saving or other benefits" (Lacity and Hirschheim, 2003)? Willcocks and Sauer report that selective and in-house sourcing had success rates of 77%. While of the total outsourcing deals (80% or more of IT activities outsourced), only 37% were successful, 35% failed and 28% had mixed results (Willcocks and Sauer, 2000).

The second reason for selecting this topic is related to the Philips (Annex B) IT purchasing organization, due to the employment by Philips General Purchasing (PGP). The aimed benefit for PGP is to develop a success factor assessment tool that contributes to preparing new ITO contracts. The IT purchasing organization should stimulate the use of this tool in the multidisciplinary teams that are responsible for setting up ITO arrangements. The tool will contribute in the outsourcing process by providing insight in success factors of ITO.

Existing literature research provides a lot of information on (IT) outsourcing. Only little research has been conducted on the evaluation of the ITO success factors, which should make an ITO contract successful. Due to the actuality of (IT) outsourcing and the gap in literature, this project will focus on the assessment of success factors of ITO contracts.

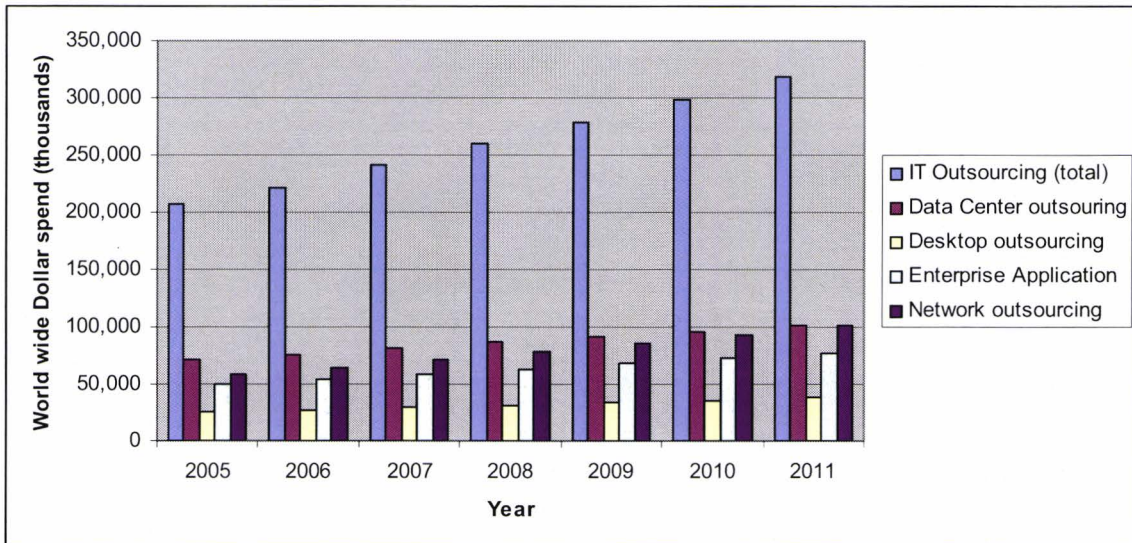


Figure 1.2 ITO World wide spend (source Gartner Dataquest, 2005)

## 1.2 Approach

In this report the term research will be used if the information has been obtained from external sources. The term 'project' will be used in case of performed project research.

The scope for this project has been developed in an iterative process of exploring. Orienting discussions and background from literature have provided the context in which the project develops. This chapter will elaborate on the structure of the project. It will focus on what and how to conduct this project in detail. The methodology affects the scope of the project, the validity and reliability of the results. The nature of this research is an exploratory one. The reason for the main question is that no conducted research on the ITO success factors assessment has been found. The main research question will be:

### ***What are the key success factors that determine the success of IT outsourcing (ITO) contracts?***

In order to explore and answer the main question thoroughly, the following sub questions have been defined. These sub questions (SQ) play an important role in the project:

*SQ1: What is IT and ITO?*

*SQ2: What are the trends in ITO?*

*SQ3: What are the objectives for ITO?*

*SQ4: What are the risks of ITO?*

*SQ5: How to assess ITO success?*

### **Scope of the project**

The challenge at the start of this project has been to define a clear scope, for the available time period of six months. The impact of the available period has been that the project had to be limited. Nevertheless the project should be of academic level and provide results in practice. Limitation of the project does not mean total exclusion of topics. The report provides a broad ITO context (for example IT outsourcing theories) and concludes with recommendations for new research. The project has been structured in the following phases:

- 1) The first project phase is to explore the success factors of ITO in literature and practice*
- 2) The second phase is the data analysis of success factors from practice and literature*
- 3) The final phase is the design of the ITO success factor assessment framework and tool*

### **Methodology**

The methodology of the research will be discussed in this paragraph. This concerns the steps which are planned during the project for answering the project questions and realizing the deliverables. The research model has been depicted in Figure 1.3 (based on Verschuren and Doorewaard, 2005). The research has been divided into three phases, namely the exploration, the analysis and the framework design & validation.

The first phase of this study has been exploring the ITO success factors in literature and practice. This phase consisted of a literature study on IT and ITO and a literature study on ITO success factors. The gained knowledge from literature has been used to prepare an interview questionnaire. Based on this questionnaire semi-structured interviews with ITO experts have been conducted. The objective of the interviews has been to clarify what success factors, according to experts, are important to make an ITO contract successful.

The second phase has been the analysis of success factor data from practice and literature. The interview results have been analyzed and cross checked with the review from literature. From this analysis an ITO success factor list scoped for IT services has been defined. This list has been validated by sourcing- and outsourcing specialists by providing an importance ranking. A round table session has been the setting for the source (customer) rank validation. The outsource (supplier) ranking has been performed on an individual basis. The ranked list has been a key component for the development of a success factor assessment of ITO contracts.

The final part is validation of the framework and implementation in an assessment tool. The tool has been explained by the use of an ITO case. Finally the conclusions and recommendations of this research have been provided.

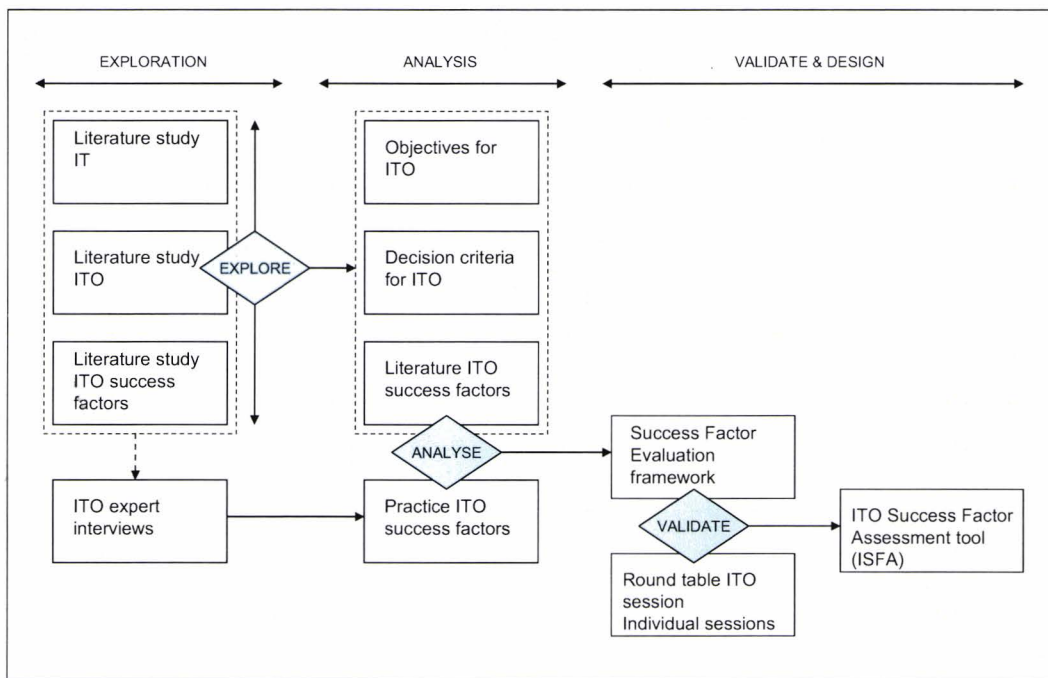


Figure 1.3 ITO performance research model (Verschuren and Doorewaard, 2005)

### Structure of the report

The structure of the report is depicted in Figure 1.4. The first phase, exploration, has been outlined in chapters one and two. Chapter one describes the orientation which has led to the research questions and deliverables. Chapter two has been based on an extensive literature review, to provide the context for the project. This review has provided information on IT, ITO and the success factors of ITO contracts. The used literature sources have been outlined in the reference list (see Annex A).

The analysis phase that has resulted in an initial framework is outlined in chapter two. To come to a revised framework multiple sources of information have been used that has been explained in chapter three. The interview analysis has also been processed in this chapter that has resulted in a success factor list.

Chapter four explains how to assess by the validation of the framework and design of an assessment tool. The success factor framework has been validated in a round table session and implemented in the ITO success factors assessment tool as described in this chapter. Chapter five has outlined the conclusions and further research propositions. The recommendations have been provided in this chapter for business practice and follow-up research topics in the domain of ITO success.

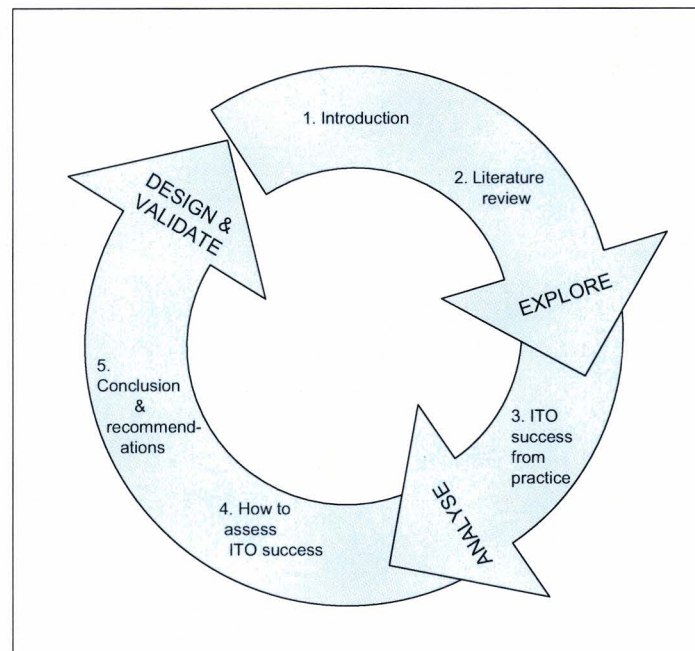


Figure 1.4 Project report structure

### 1.3 Conclusion

IT outsourcing (ITO) is a very real topic on the boardroom's agenda. Examples of aimed ITO benefits that have stimulated the enormous growth since 1996 are lower cost, improved productivity, increased quality, higher customer satisfaction, time to market and the ability to focus more on core competences. During this growth not all ITO arrangements appeared to be successful. The question raised while observing this fact is why and what to do to prevent these failures? Reviewing existing literature has unfortunately not resulted in a clear answer to this question. Only little research has been found on the topic of the relation of ITO success factors with performance (or failure). Outsourcing is not often evaluated in practice which clarifies that hardly any evaluation data is available. The available detailed data of evaluated ITO has been based on the known successful arrangements. The publication of less successful deals apparently has not been preferred. The failure could be considered as a loss of face which might impact business directly. Evaluation of these cases will provide opportunities and learning for new cases to prevent reiteration.

The lack of ITO evaluation and only little specific literature has resulted in the definition of the main research question: 'What are the key success factors that determine the success of IT outsourcing (ITO) contracts?' The research deliverable is an ITO success factor assessment, which will stimulate and support the evaluation of ITO on success factors. This tool should assist sourcing organizations to prepare for success in ITO and help to prevent failure, as observed from practice. Chapter one has clarified the research approach, the questions and structure of the report. The first step in this approach is a literature review. Chapter two will elaborate on the context of ITO and provide a success framework that will guide through this study.

## 2. Literature review

To be able to answer the project questions, chapter two will focus at the context of ITO. The chapter has been structured in two sub-chapters. The first part is an exploration on IT and ITO. The second part elaborates on the process of ITO and the business-IT alignment with at the last section of this chapter the initial project framework.

### 2.1 ITO exploration

The literature exploration provides relevant information providing the context in which this project has developed. The reviewed information will elaborate on IT and ITO, trends, objectives, justifications, success and provides the project scoped definitions.

#### 2.1.1 Definitions of IT

Information Technology (IT) is probably one of the most used terms in business nowadays. Information should not be confused with knowledge, but unfortunately this happens occasionally. The Information Technology Association of America (ITAA), an industry trade group for several IT organizations, has defined IT as:

*IT is the study, design, development, implementation, support or management of computer based information systems, particularly software applications and computer hardware*

IT deals with the use of electronic computers and computer software to convert, store, protect, process, transmit and retrieve information. In this definition, the term “information” can usually be replaced by “data” without loss of meaning. Nowadays it has become popular to broaden the term to explicitly include the field of electronic communication so that people tend to use the abbreviation ICT (Information and Communication Technology). The IT function is multifaceted and complex (Tho, 2005). This complexity is increased as components and infrastructure built using new technology advances at very high pace. Within IT a distinction can be made in service types. Practically the various functions in IT for example involve dynamic complex tools embedded in a core business process, a clustered service task performed by IT consultants or a computer used for email checking and writing notes. Figure 2.1 shows IT services clustered in four categories (Ward and Peppard, 2002). In this activity overview, generic services e.g. account management are found. The functions are specifically related to IT, e.g. IT account management.

<i>Strategy and planning services</i>	<i>Application development services</i>
IT strategy development IT planning and resource development Technology roadmap Account management Consultancy/business analysis Contingency planning Capacity planning New service development	System analysis Systems design Package evaluation Systems implementation Programming and software development Software acquisition Project management Information management
<i>Application and technical services</i>	<i>Technology delivery and maintenance services</i>
Training Application maintenance and change control First line user-support/problem resolution Advice centre Security/Access control Information procurement (external)	Installing, PC, servers, cables Keeping network running Maintenance of hardware Upgrade software/version control Supplier and contract management

Figure 2.1 Examples of IT services (Ward and Peppard, 2003)

As organizations realize the need for the IT function, they are faced with the challenge to maintain a fully operational IT function within the organization. This is challenging because IT is often not a core competence of an organization. An organization's strategy on non core activities could therefore provide in a plan for ITO possibilities. Specialist service organizations for managing up to entire business processes are attracted to take over these challenges. This would provide organizations with predictable outcomes and costs to allow them to focus on core business operations (Tho, 2005). This statement underlines the organizational point the view on IT. This is often either a core activity or defined as one of the enablers for supporting an organization's core business process (Hirschheim et al., 2006).

In the context of outsourcing decision making of IT services, Lacity and Hirschheim provide a matrix for summarizing perceptions of the trade-off between the service delivered and the cost to the organization of the service provision (Figure 2.2). The IT activity examples of Ward and Peppard can be positioned in this model. Senior management will pay attention to the cost of IT, whereas users themselves are very aware of the quality of services, but probably unaware of the costs. The objective of providing a premium service at minimum cost would be preferred in most cases. If users perceive a service as poor and management is dissatisfied with high expenses – The Black Hole- it may be too late for IT management to retrieve the situation. In that case alternative service suppliers will have to be considered.

	Minimal cost	Premium cost
Premium service	<p><b>Superstar</b></p> <p>Meets senior management and users' ideal expectations</p>	<p><b>Differentiator</b></p> <p>Meets user expectations but needs to find more cost effective ways of sustaining performance</p>
Minimal service	<p><b>Commodity/low cost producer</b></p> <p>Meets senior management expectations, but users may go elsewhere...</p>	<p><b>Black hole</b></p> <p>Failure to meet either group's expectations</p>

Figure 2.2 IT cost/service trade-off (Lacity and Hirschheim, 1995)

### 2.1.2 Definitions of ITO

The term outsourcing is used diversely in practice. Therefore various definitions of outsourcing exist. Outsourcing means according to the NEVI: 'An organization divests itself of the resources to fulfil a particular activity to another organization to focus more effectively on developing its own core competences' (NEVI, 2000). To elaborate on this definition, Prahalad and Hamel state that a core competence is a bundle of skills and technologies that enables an organization to provide a particular benefit to customers (Prahalad and Hamel, 1990). Generally outsourcing is defined as: 'The use of external agents to perform one or more organizational activities' (Lacity et al., 1996). This definition explains the outsourcing of any organizational function. Within this project related specifically to ITO, a more specific definition for ITO is provided (Loh and Ventaktraman, 1992): 'The significant contribution by external suppliers in the physical and/or human resources associated, with the entire or specific components of the Information Technology, in the user organization'.

The project definition is based on a set of definitions from research, due to that the found definitions of ITO are considered extending each other. The definition contains two components, the initial transfer of assets to the third party and the services to be received during an agreed period of that party (based on Loh and Venkatraman, 1992):

*ITO* is a process whereby an organization 1) decides to contract out or to sell the firms IT assets, people and/or activities to a third party supplier, 2) who in exchange provides and manages these assets and services for monetary returns over an agreed period of time with an performance agreement

To clarify difference in outsourcing terminology the following definitions have also been provided. In practice not always the organization has transferred IT assets or people to the supplier. In case there is no transfer of assets or people at all it can be considered as out-tasking (Delen, 2005):

*Out-tasking* is 1) the transfer of selected (IT) activities to an external supplier without the related assets and people and 2) receive these activity services of a supplier during an agreed period with a performance agreement

Outsourcing is considered by the supplier as insourcing. This definition is also valid in case the customer organization IT department is responsible for managing and providing IT services. The definition of insourcing can therefore be seen as the complement of ITO:

*IT insourcing* is a process whereby an organization 1) decides to adopt the customer IT assets, people and/or activities, 2) and provides and manages these assets and services for monetary returns over an agreed period of time with an performance agreement

In case the outsourcing arrangement involves activities performed by far (low wage) countries these are defined as off-shoring:

*Off-shoring* is that domestic (e.g. US) organizations shifting services and/or activities abroad to unaffiliated organizations or their own affiliates

An important difference between ITO and IT purchasing or IT contracting is that assets will be transferred to the outsourcing organization, for example hardware. Therefore the definition of purchasing has been provided (Van Weele, 2005):

*Purchasing* is the management of the organization's external resources in such a way that the supply of all goods, services, capabilities and knowledge which are necessary for running, maintaining and managing the organization's primary and support activities is secured at the most favourable conditions

Arranging and managing the contribution of an independent organization servicing the transferred assets requires different competences for the sourcing organization (Willcocks, 2006). These



competences will be explained in chapter 2.2. The sourcing organization has to manage the (services of the) outsourcing organization. As depicted in Figure 2.3 the IT provisioning will go further than purchasing or contracting of assets and services. Outsourcing requires purchasing according to the overlap in this model, though this is only a small part of the complete process. For example transfer of people requires human resource management expertise and involvement of the Workers Council.

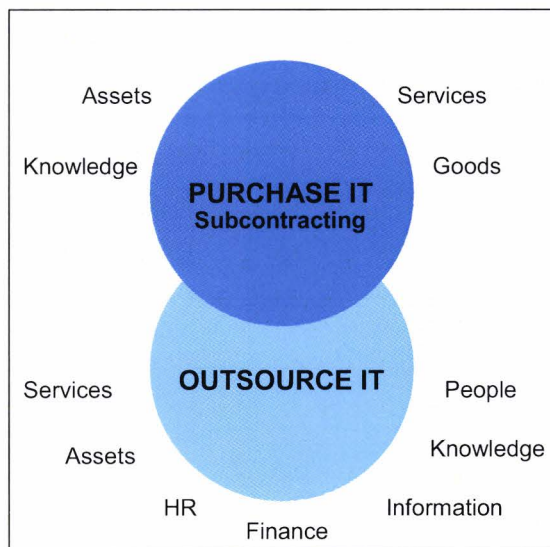


Figure 2.3 Purchasing versus outsourcing of IT

The complexity of ITO is impacted by a selected strategy. On the other hand the strategy impacts the ITO complexity. The project will not focus on this relation, but provides background information. Alternative paths that come forth of strategies and have been defined in ITO solutions are shown in Figure 2.4. The Lone wolf solution is for example a newly created business unit, which provides the procurement services. The joint venture solution contrasts with the internal utility, by the use of joint forces. The business service provider, business process operations and application service provider are the solutions that involve external organizations in providing services (Chorafas, 2003). These strategies can be seen as the black-and-white strategies. In practice many organizations use combinations of the strategies.

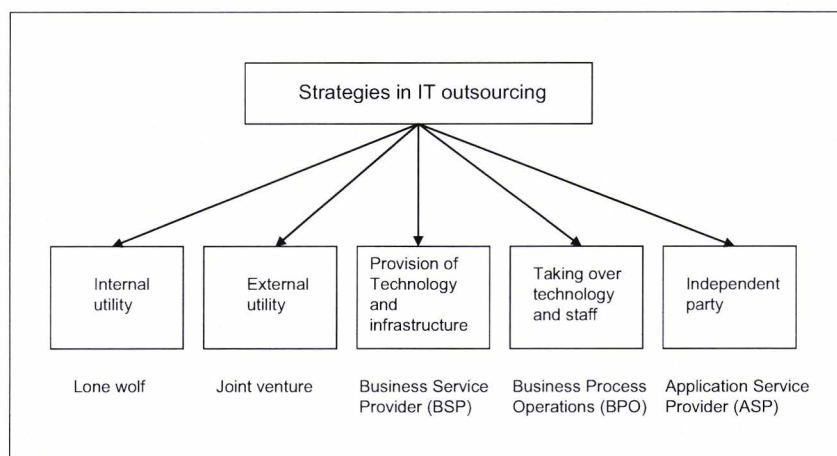


Figure 2.4 From strategy towards solutions in ITO (Chorafas, 2003)

### 2.1.3 ITO objectives

There are several reasons for organizations to consider ITO. The advantages depend on various factors for example the type of service, the maturity of the organization and leverage. Concerning the objectives of (IT) outsourcing a lot of research has been conducted. The objectives are in no specific order categorized in Strategic, Economical, Operational and Emotional (Van der Zee and Wijngaarden, 1999).

#### *Strategic objectives*

- *Core business focus*: core business is a very important driver. When organizations tend to focus on their strategic issues, the managers spend their time more effectively. Where the computing tasks are a commodity and non-core, they could be outsourced
- *Innovation*: the outsourcing organization can acquire better access to technical and business specific knowledge through the service-provider. The larger scale of the service-provider enables opportunities such as research facilities
- *Transformational*: outsourcing specifically for attaining new organizational capabilities. Four different varieties of transformational outsourcing are found: (1) Rapid start-up, to scale up for new business; (2) Pathway to growth, to fix a key process that stands in the way of growth; (3) Change catalyst, to signal broad change and focus on adding value; (4) Radical renewal, to improve core operating capabilities radically (Linder, 2004)

#### *Economical objectives*

- *Cost*: the costs can be decreased by using the efficiency of large IT suppliers. They can often leverage in purchasing and rationalize the processes
- *Control*: a better anticipation of the costs can be made, because hidden costs are visualized. The organization regains control over its IT costs
- *Risks*: the organization transfers several risks to the service-provider. The risk for example of unexpected costs like fast technology obsolescence are now handled by the service-provider
- *Increase venture capital*: the outsourcing provides an opportunity to liquefy the organization's tangible and intangible IT assets, by selling the resources to the service-provider and leasing them back

#### *Operational objectives*

- *Quality*: ITO provides the possibility to achieve higher service levels. The business demands higher service levels than the internal IT department could deliver before
- *Flexibility and capacity*: when a certain IT service is outsourced, the organization can react on fast changes of the demand of IT services of the business. The variable deployment of the IT capacity
- *Transition*: while an organization is migrating to new hardware or software platforms, the old platforms are often outsourced. They manage and operate these systems until the migration is complete and the new systems proved reliable

#### *Emotional objectives*

- *'Bandwagon' effect*: the so-called 'bandwagon' effect is considered as not a good motive to consider ITO. Organizations should not outsource just because other organizations have outsourced their IT
- *Faith*: when business management has lost their faith in the IT department, it is possible to eliminate this by outsourcing IT activities. Through sourcing alternatives, high-quality standards will be applied to the existing staff. The IT staff is transferred to the supplier
- *Uncertainty*: 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

#### 2.1.4 Trends in ITO

Since the moment Eastman Kodak Co. signed its world-famous 10-year 250 million dollar outsourcing deal with IBM Co. IT in 1990 (Field, 1999), outsourcing has been a hot topic of top management. Chief Information Officers (CIO) from other organizations jumped on the bandwagon. Many things have changed in the ITO world in the subsequent decennia. In the academic environment (IT) outsourcing is a well-discussed subject. Studies have been conducted by several organizations. Theoretical research has been done by international researchers like Leslie Willcocks (University of Oxford & University of Melbourne), Mary C. Lacity (University of Missouri) and Rudy Hirschheim (University of Houston) and also Dutch like Han van der Zee (University Tilburg). Not only universities, but also commercial institutes explore (IT) outsourcing. Giarte and Gartner are examples of organizations that conduct market research. While outsourcing has grown beyond the domain of IT decisions, such as where and how to source IT to a much wider set of business functions, ITO leaded with 67% of all global outsourcing deals in 2004 being related to IT (Souza et al., 2004). Lacity and Willcocks have researched ITO trends from 2006 to 2011 (Willcocks and Lacity, 2006). From this research the following trends have been defined:

- *Spend increase*: spending will continue to rise in all global sourcing markets despite 2004-05 media attention on backsourcing. There have been some high profile backsourcing (returning services in-house) cases in the recent years, but this does not represent a dominant trend
- *Market players*: developing countries beyond India will become important players in the global business and IT services market. There will be many shifts in preferred sourcing locales and suppliers. Countries such as the Philippines and China will likely resume the role traditionally held by India. This role is low cost staff augmentation for repetitive and highly defined tasks. India will remain strong, but with a different focus higher in the value chain. As the large Indian suppliers gain experience and build relationships with foreign customers, they will be able to demand higher prices to reflect higher value. The large Indian suppliers already subcontract to lower wage countries as China. Such trends are likely to continue given the rise of Indian salaries
- *Application Service Provision (ASP) revival*: large organizations will give ASP a second look. Large organizations used not to be interested in ASP because they had ASP offerings and expertise in-house. This changed for multiple reasons. For example the demand for net-native applications: a proprietary application designed and delivery specifically for delivery via the internet, only available via ASP. Another reason will be that large organizations will finally be ready to abandon their expensive proprietary suites, for cheaper ASP alternatives (e.g. office suits via organizations like Google)
- *Business Process Outsourcing (BPO)*: BPO will overshadow ITO. Suppliers are rapidly building capabilities to reap the benefits from improving inefficient processes and functions. BPO deals will swallow much of the back offices IT systems. Suppliers will increasingly replace customers' disparate back office IT systems with web-enabled, self service portals
- *ITO growth*: ITO will continue to grow, but with new value propositions from the market. An increasing number of organizations are outsourcing nearly all areas except for strategic planning. As markets will become more mature and competitive this number will continue to increase. The suppliers will need to become increasingly create in their search for profitable business models
- *Sourcing*: selective sourcing with multiple suppliers will remain the dominant trend. In the developed economies over 75 percent of organizations outsource fifteen to fifty percent of their IT budgets. This is typically done with multiple suppliers

- *Control of ITO:* customers are taking control in driving and designing deals. Customers are recognizing that they need to understand and control the conditions under which their money is spent. Competitive tendering should be seen as a healthy race among world class athletes, not a fight to death gladiators. The suppliers need to educate the customer during the earliest phase on what can reasonably be delivered
- *Contract management:* customers will invest much more in contract management. Doing the upfront work is a prime determinate of outsourcing success. Customers will learn how to build the internal core capability to levels that give a better payoff from outsourcing
- *Insourcing:* outsourcing will help insourcing. In-house operations are facing real competition and can no longer assume they will retain their monopoly status within the organization. As a result the in-house operations are adopting the techniques of the market, for example the use of Service Level Agreements
- *Maturity:* customers will move en masse from 'hype and fear' into maturity. A slow but rising tide of improvement is expected, in the customers' ability to manage ITO and BPO
- *Disappointments:* outsourcing failures and disappointments will continue. Outsourcing will continue to be a high risk and a hidden cost process in organizations where: learning is painfully slow, in deals where suppliers do not make reasonable margins and when customers organizations do not strategize, configure, contract for, monitor and manage their deals effectively

### 2.1.5 Risks of ITO

In the previous paragraph the trend of disappointments has been discussed which is related to risk. Risk as an undesirable event is defined as "...events that, if they occur, represent a material threat to an entity's fortune" (Schneider and Levine, 1997). Using this approach, risk can be interpreted as occurrence of undesirable events. In this context the "entity" would be the organization. Many researchers have studied the risk factors that are common within the ITO business. Whenever there is an outsourcing decision, there is a risk associated with it. Unmanaged risk has a probability of influencing the performance of an outsourcing contract. In other terms risk is related to the success of an outsourcing contract. As defined by Hirschheim et al. risk has been presented from various perspectives. This is also considered from a risk management perspective (Hirschheim et al., 2006). The perspectives are (1) Undesirable event: in some disciplines, risk is defined as the probability of an event (2) Variance: In finance, risk is calculated as the variance of the distribution of outcomes (3) Expected loss: In some disciplines such as casualty insurance, risk is interpreted as expected loss, which is the product of a loss function and a probability function

To evaluate risk exposure the project recommends identifying the array of potential undesirable outcomes. These could occur with respect to an outsourcing contract, as well as a probability of occurrence of such outcomes. Theoretically risk exposure can be mapped in a graphics style. In practice it is computed and expressed in for example Euro terms. From Hirschheim et al. a risk assessment framework is provided in Figure 2.5, which shows an example in a risk evaluation presentation.

An ITO contract that will be assessed on risk factors continuously will have an increased probability of being successful. Examples of risks from ITO (Dalcher, 2005) are dependency on the supplier, loss of control over the IT function (technology and direction), loss of technical skills, reduction in commitment, vulnerability of information and intellectual property, strategic vulnerability, potential for escalation of contracts (and costs), irreversibility of the decision, supplier lock-in, legal advisory and additional fees often ignored, long term ITO contracts may complicate future mergers and acquisitions.

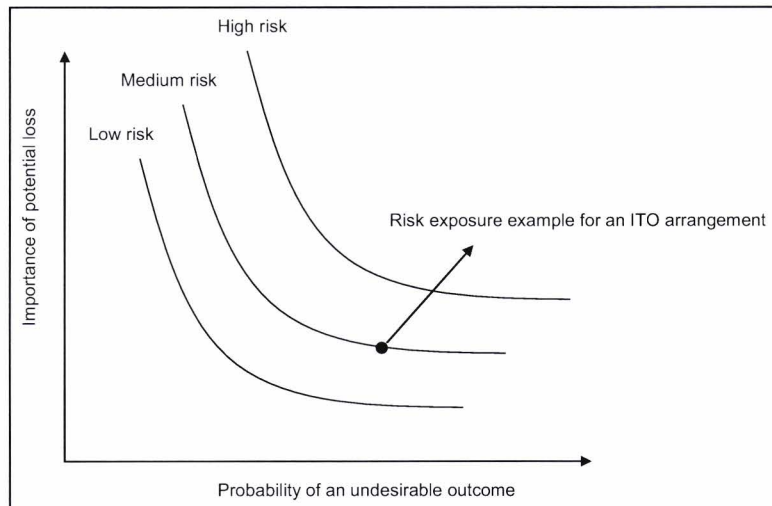


Figure 2.5 Risk exposure example (Hirschheim et al., 2006)

### 2.1.6 ITO justification theories

There are various theoretical justifications for ITO. The most popular theories are according to Dahr and Balakrishnan: the Transactions Cost Theory, the Agency Theory and the Contractual Theory. Additional to this, research on theories from Gottschalk and Solli-Saether has been provided. This research outlines from eleven theory perspectives why ITO is occurring worldwide. The paradigms of these theories are used for preparation the ITO success factor list (Dahr, 2006; Gottschalk and Solli-Saether, 2006). The definitions of the theories have not been provided but can be obtained via the literature references (Annex A). In Figure 2.6 an overview has been provided of what according to the theories should be outsourced.

Theory	What should be outsourced to succeed?
Transaction cost theory	All IT functions where benefits for the organization are greater than the transaction cost. The benefits include increased revenues and reduced costs. Minimize the transaction cost by reducing the need for lasting specific IT assets; increase transaction theory; reduce complexity and uncertainty in IT tasks; improve performance measurements; and reduce dependence on other transactions
Agency theory	Only IT functions, where the supplier and customer have common goals and the same degree of risk and aversion. It must be easy and inexpensive for the customer to find out what the supplier is actually doing. In addition, both outcome based and behaviour based incentives can be used to reduce and prevent opportunistic behaviour

Contractual theory	Only IT functions where the organization can expect or secure that customer and supplier will have the same contractual behaviour. Common contract behavioural patterns include role integrity, reciprocity, implementation of planning, effectuation of consent, flexibility, contractual solidarity, reliance, restraint of power, proprietary of means and harmonization with the social environment. A complete contract based on information symmetry in a predictable environment with occurrence adaptation that prevents opportunistic behaviour in an efficient collaborative environment with balance of power between customer and supplier, where the contract is a management instrument that grants decision rights and action duties
Theory of core competences	All IT functions, which are peripheral to the organization's production of goods and services for the market. Capability to define the IT needs and availability to manage IT services from the supplier represent the core competence within IT needed in the customer organization to succeed in an outsourcing contract
Resourced-based theory	All IT functions where the organization does not have sufficient strategic resources to perform in a competitive way. Strategic resources are unique, valuable, difficult to imitate, exploitable and difficult to substitute. Capability to integrate and exploit strategic IT resources from the supplier with the own resources to produce competitive goods and services. An example of such a resource is the supplier's competence in a IT application area where the customer has limited experience
Neoclassical economic theory	All IT functions which an external supplier can operate at lower costs than the organization itself. Capability to integrate and exploit IT services from the supplier together with own services to produce competitive goods and services. An example of such a service is the supplier's operation of the customer's communication network
Partnership and alliance theory	Only IT functions, where the organization can expect and secure a partnership and alliance with the supplier. This implies interdependence between the partners based on trust, comfort, understanding, flexibility, co-operation, shared values, goals and problems solving, interpersonal relations and regular communication. Develop experiences with alliances, develop alliance managers and develop the ability to identify potential partners

Relational exchange theory	Only IT functions, where the organization can easily develop and secure common norms with the supplier. Norms determine behaviour in three main dimensions: flexibility, information exchange and solidarity. Develop and secure common norms that are relevant for both parties. Norms determine behaviour and are and are mainly concerned with flexibility, information exchange and solidarity. Norms will secure integration in the relationship, which takes place through involvement. Involvement occurs by coordination of activities, adaptation of resources and interaction between individuals. The degree of involvement in these three dimensions is called activity link, resource link and actor link
Social exchange theory	Only IT functions, where each of the parties can follow their own self-interest when transacting with the other self interested actor. The goal is to accomplish individual goals that they cannot achieve alone and without causing hazards to the other party. Enable social and economic outcomes in the exchange between customer and supplier such that these outcomes outperform those obtainable in alternative exchanges. Positive economic and social outcomes in the exchange over time increase the partners' trust of each other and commitment to maintaining the exchange relationship. Commitment is important as it is an exchange partners' belief that an ongoing relationship with another is so important as to warrant maximum efforts at maintaining it
Theory of firm boundaries	All IT functions that satisfy several of the other theories, mainly resource based theory and transaction cost theory. The supply of IT services from the organization's environment should change from firm boundaries between the firm that desires the competence (sourcing firm) and the firm having the technology (source firm) in a clear and unambiguous manner. This can be achieved in a strict and rigid division of labour between customer and supplier
Stakeholder theory	Only IT functions, where a balance can be achieved between stakeholders, stakeholders relevant in ITO include business management, IT management, user management and key personnel at the customer and business management, customer account management, and key service providers at the supplier. Create efficient and effective communication with and between stakeholders to secure continued support from all stakeholders, to balance their interests and to make sure the ITO contract so that all stakeholders achieve their goals

Figure 2.6 Possibilities and limitations on ITO (Gottschalk and Solli-Saether, 2006)

The justification theories of ITO of Figure 2.6 provide insight from different perspectives or a paradigm how to be (come) successful in an outsourcing contract. The reflection of these theories has provided the knowledge to create a questionnaire for the expert interviews (see Annex C). The questionnaire has provided the basis to gain insight of the field experience of ITO success versus the found research definition(s). The reflection of the statements what should be outsourced according to the theories, are reflected according to eleven critical success factors. These factors have been derived by Gottschalk and Solli-Saether (2006) based on the definitions within this paradigm. The next paragraph will explain the derived factors.

### 2.1.7 Success definition from literature

This paragraph discusses the critical success factors that have been derived by Gottschalk and Solli-Saether (2006) from the theories discussed in the previous paragraph. Before elaborating on the factors, the definition of success should be clear. An ITO arrangement is often considered successful when the outsourcing organization is satisfied to the extent that they would like to continue ITO with the same supplier under the same conditions (conditions may be adjusted under changed market or organizational circumstances). Success has been defined as the achievement of the objectives or goals (effectiveness) or as an event that accomplishes its intended purpose (quotation Van Weele).

*Success factors* are conditions that must exist in advance in order to achieve success. If the objectives associated with those factors are not achieved prior to the outsourcing initiative is commenced, the ITO is likely to fail. Organizations that do not possess these attributes or execute these functions poorly will often not be successful (Rockart, 1979).

Success factors must be established to enable success, but they are not sufficient to guarantee it. From this perspective the critical success factors derived from the justification theories, by Gottschalk and Solli-Saether (2006), are discussed. The eleven critical factors have been extended with research of Van Weele (2006) on outsourcing success factors.

*Core competence management* which means that the organization has to define its IT needs and manage IT services from the supplier. According to van Weele this means insight in business goals. The reason for entering an outsourcing process has to be aligned with the business strategies. Taking a decision on a non core activity to be outsourced should be independent of an economic possible recession at hand.

*Supplier resource exploitation* defines that the organization has to integrate and exploit strategic IT resources from the supplier together with its own resources to produce competitive goods and services. Van Weele addresses the factor of personnel attention. Outsourcing influences the way of working, which could result in changing job responsibilities or even substituting jobs. Informing the current personnel in time helps in preparation of what is expected from the employees involved.

*Transaction cost reduction* is the organization has to minimize transaction costs by reducing the need for lasting specific IT assets, increase transaction frequency, reduce complexity and uncertainty in IT tasks, improve performance measurements, and reduce dependence on other transactions.

*Contract completeness*, in other words, the organization must have a complete ITO contract. The contract should prevent opportunistic behaviour in an efficient collaborative environment with balance and of power between customer and supplier. Van Weele states this as a correctly structured contract. For the involved parties, being either the supplier or the customer, the agreement has to be realistic and reasonable. The Service Level Agreement (SLA) should reflect the common goals of the relation between the parties. The contract should be of a win-win type which will stimulate a successful partnership. All performance indicators, to ensure a measurable outsourcing relation, should have been adopted in the SLA.

*Production cost reduction*, to realize this, the organization has to integrate and exploit IT services from the supplier, in a cost effective way, to produce competitive goods and services.

*Alliance exploitation* means that the organization has to develop experience with alliances, develop alliance managers and develop the ability to identify potential suppliers.



*Strategic positioning* is that the organization has to develop and secure common norms that are relevant to both parties. Van Weele addresses the importance of the position of the outsourcing party related to the potential supplier providing the services. Important is to stay in control of the outsourced relation, which means not being dependant (e.g. knowledge and equipment). The supplier providing the service should not be able to create a position, in which it can pursue enormous cost rises.

*Social exchange exploitation* means that the organization has to enable social and economic outcomes in the exchange between the supplier and itself, such that these outcomes outperform those obtainable in alternative exchanges.

*Supplier behaviour control* is that the organization has to make it easy and inexpensive to find out what the supplier is actually doing. In addition both outcome-based and behaviour-based incentives can be used to reduce and prevent opportunistic supplier behaviour. Van Weele addresses *continuous relation management*. Managing the contract instead of managing people, this will be the new challenge for the outsourcing organization, e.g. a non core business process. Bonuses as part of the agreement could help keep the supplier motivated to meet expectations.

*Demarcation of Labour* is important to be considered, the organization has to implement a strict and rigid division of labour between the supplier and itself.

*Stakeholder management* means that the organization must create efficient and effective communication with and between stakeholders to secure continued support from all stakeholders, to balance their interests and to make the ITO contract so that all stakeholders achieve their goals. Van Weele defines that an open way of communication, based on an agreed frequency, between various organizational levels is essential. Within the Service Level Agreements reporting on Performance Indicators have to be included. An essential part of communication is the training of people concerning the new way processes have to be carried out.

*Strategic vision and strategic plan*, solving operational problems should never be the only decision factor to start outsourcing. For example shortage of labour on IT capacity (e.g. SAP consultants). The activity in the scope of being outsourced should be evaluated on potential advantages, risks an expected (political) organizational resistance.

*Correct supplier selection*, the supplier selection should have been based on a thorough selection process. The selection process should be consistent and contain diverse criteria on the decision. Think of criteria as technical and management capabilities, but also roadmaps, business strategies, etc..

*Senior management support* should be considered due to complex decision taking of long term contracts with large sums of money involved, top management support is crucial.

In chapter one it has been discussed that only a little research has been found on ITO success factors. This list of success factors has therefore been considered as the initial list for the project, but was considered to be incomplete. The interview data is expected to provide an extension to this list, which will be presented in the next chapter (3).

#### ITO at American Express

*Janet Walker, director of resource strategy at American Express, is not too surprised to see cost savings play a secondary role at organizations that are outsourcing or considering ITO. "For us, it is certainly a factor -it would be absurd not to be- but to focus on that sends the wrong message to employees and even customers and shareholders," she points out. (The Outsourcing Institute, 2002)*

## 2.2 The ITO process

This paragraph provides the context of the outsourcing process related to this project. The ITO process has been used to explain the scope of the assessment and a reflection on the usage. In the second subsection the essence of business and IT alignment in an ITO arrangement will be discussed. The reason for this is that the initial framework of this project has been based on this alignment. The final part of this paragraph will explain the initial framework.

### 2.2.1 How to ITO

This project has been based on a circular process framework, which is called the Outsourcing Lifecycle Model (OLM). The process of outsourcing in generic is considered to be an ongoing process, with continuous room for improvement. Various literature research provide three phases that can be distinguished, a strategic phase (why, what and who), a transition phase (how) and an operational phase (manage) (Van Weele, 2005). Based on these three phases Momme (2002) has developed a framework that describes six steps in the process of outsourcing (Figure 2.7). Momme has stated that outsourcing is a dynamic process in the sense that the related decisions and actions must continuously be adapted to changes in the strategic direction of the organization. In addition, he defines that outsourcing is a recurring process (cycle), because the organization at the end of the contract period faces the decision on whether to prolong the relationship, find an alternative supplier or take back the functional area (insourcing). One of the underlying rationales is that any outsourcing relationship is restricted in time. Irrespective of whether the two parties have prolonged the relationship one or more times as a result of successful conditions, the organization should guard against the fact that the relationship could phase out at one point in time.

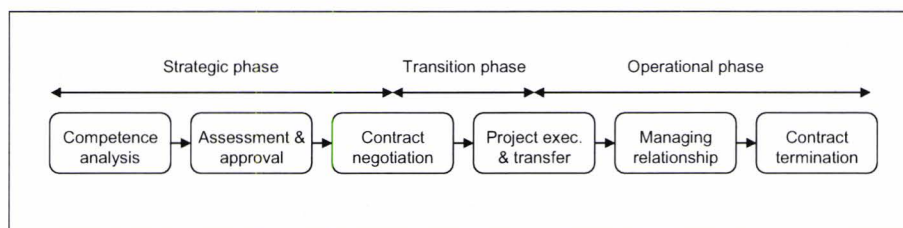


Figure 2.7 The outsourcing process (Momme, 2002)

Lacity and Willcocks also describe a six-phase outsourcing process model (Lacity and Willcocks, 2001). However this model only explains the process at high level. Klepper and Jones (1998), Hurley and Costa (2001) have developed more comprehensive models. In their models the importance is recognized of pre-agreement and post-agreement activities and their complexities. Based on these models the OLM has been developed by Cullen, Seddon and Willcocks and is shown in Figure 2.8 (from Willcocks and Lacity, 2006). Momme describes a circle involving the process from the start of the relation to the end and mostly the decision for renewal of the arrangement. The OLM provides in addition to the framework of Momme a continuous circle process. The OLM framework provides a template that defines the fundamental process activities for managing outsourcing together with the evidence of their importance. The OLM consists of four phases:

- 1) *Architect phase*: the foundation for outsourcing is laid, consists of four building blocks (investigate, target, strategize and design). At the end of this phase the organization knows itself well enough to confidently publicize its needs
- 2) *Engage phase*: one or more suppliers are selected and the deal is negotiated. It consists of two building blocks (select and negotiate)

- 3) *Operate phase*: the deal is put in place, operationalized and managed through its term (transition and manage)
- 4) *Regenerate phase*: the next generation options are assessed (refresh). Following this phase the lifecycle starts again, returning to the Architect phase. The organization is preparing for its next-generation deal(s)

This project recommends that this circle framework will be run continuously during an ITO arrangement. The reason for this is that the process of outsourcing will develop new insights in every phase of the process. The new insight will lead to opportunities of optimization but will also benefit to managing the arrangement. Considering the complexity of outsourcing and specifically ITO, the continuous process of reflection will contribute to the quality and success of an ITO arrangement. Issues might arise in a later stage of the ITO arrangement but will be notified due to the reflectivity of the process. This process has a strong similarity to the *Plan-Do-Check-Act* circle of Deming which is used in business processes for example quality management (Deming, 1982).

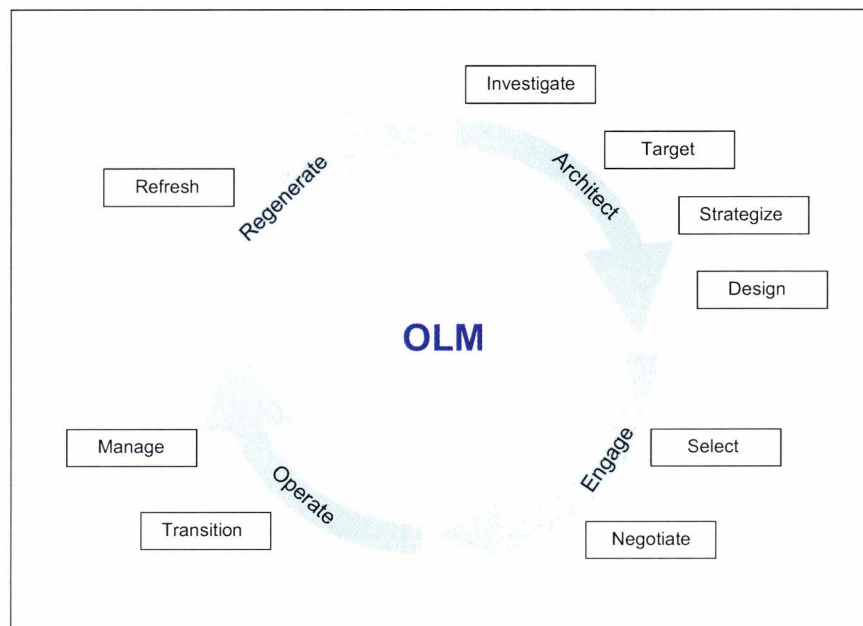


Figure 2.8 The Outsourcing Lifecycle Model (Willcocks and Lacity, 2006)

### 2.2.2 Alignment of Business and IT

ITO arrangements can be extremely successful, but what is the use of this success if the organization's business result is going zero or negative? Therefore ITO should have a linkage to the business of an organization. ITO can contribute to the business positively, for example increasing business margins by ITO or to defeat the competitors in the market with information systems. On the other hand less successful ITO projects could impact the business negatively. The linkage of IT with business will be explained in this paragraph. ITO is considered here as part of the mentioned IT and IT strategy.

A definition of Business & IT Alignment found from research (Eksted et al., 2005): The degree to which the IT mission, objectives and plans support and are supported by the business mission, objectives and plans. Alignment however, is not a one-time activity but a constant balancing between a lead or lag strategy. This definition also reflects ITO contribution, what has been expected from an ITO arrangement from a business alignment perspective.

There is a difference between an IT strategy and an IT strategy that is contributing to the creation of business value. In the late 1980's a number of models have been developed to assess the extent of alignment of business strategies with IT strategies. The interpretation of the MIT institute is based on the inability of organizations to realize value from their IT investments. This is due to lack of alignment between business and IT strategies. The model is based on the building blocks of strategic integration and functional integration. Henderson and Venkatraman (1993) state that the alignment perspective should involve four domains of strategic choice Business strategy, Organizational infrastructure and processes, IT strategy and IT infrastructure and processes (Figure 2.9).

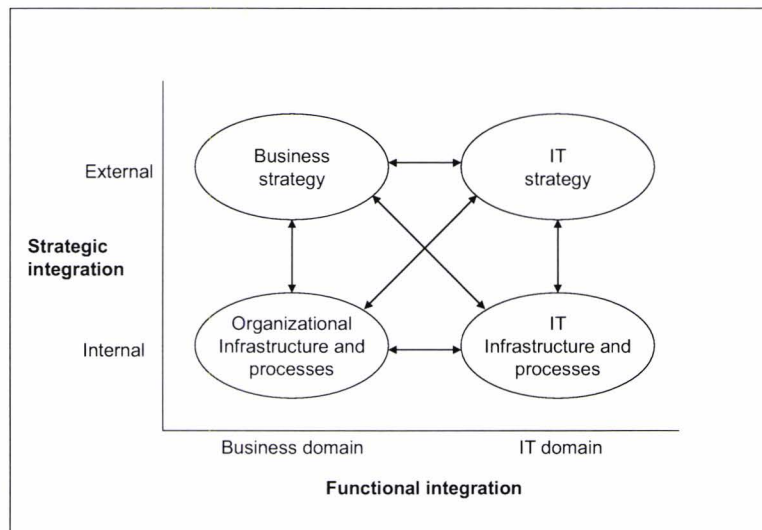


Figure 2.9 Strategic alignment model (Henderson and Venkatraman, 1993)

The horizontal dimension in Henderson and Venkatraman's model addresses that there is a direct mutual influence of business and IT. They further assume that the strategic level is predominant and gives direction to the overall relationship. However, the business-IT relationship appears to be much more complex than could be derived from this model. For example it involves cultural, political, financial and semantic aspects. It is appropriate to state that the use and the internal and external sharing of information and not its provision are of strategic nature. This project has not elaborated on this aspect, but refers to literature (for example Maes, 2000). Each domain of the strategic alignment model has underlying components of alignment:

#### *Business Strategy*

- *Business Scope*: Includes the markets, products, services, groups of customers, and locations where an enterprise competes as well as the competitors and potential competitors that affect the business environment
- *Distinctive Competences*: The critical success factors and core competences that provide a firm with a potential competitive edge. This includes brand, research, manufacturing and product development, cost and pricing structure, and sales and distribution channels
- *Business Governance*: How organizations set the relationship between management, stockholders and the board of directors. Also included how the organization is affected by government regulations, and how the firm manages its relationships and alliances with strategic partners

#### *Organization infrastructure and processes*

- *Administrative Structure*: The way the firm organizes its businesses. Examples include centralize, decentralize, matrix, horizontal, vertical, geographic, federal, and functional

- *Processes*: How the firm's business activities (the work performed by employees) operate or flow. Major issues include value added activities and process improvement
- *Skills*: H/R considerations such as how to hire/fire, motivate, train/educate, and culture

#### *IT strategy*

- *Technology Scope*: The important information applications and technologies
- *Systemic Competences*: Those capabilities (e.g., access to information that is important to the creation/achievement of a organization's strategies) that distinguishes the IT services
- *IT Governance*: How the authority for resources, risk, conflict resolution, and responsibility for IT is shared among business partners, IT management, and service providers. Project selection and prioritization issues are included here

#### *IT infrastructure and processes*

- *Architecture*: The technology priorities, policies, and choices that allow applications, software, networks, hardware, and data management to be integrated into a cohesive platform
- *Processes*: Those practices and activities carried out to develop and maintain applications and manage IT infrastructure
- *Skills*: IT human resource considerations such as how to hire/fire, motivate, train/educate and culture

Alignment continues in importance today as organizations strive to link technology and business (Luftman & Brier, 1999). Alignment addresses "Doing the right things (effectiveness) & doing things right (efficiency)". The approach applied to attain and sustain business-IT alignment focuses on understanding the alignment maturity, and on maximizing alignment enablers and minimizing inhibitors. The process includes the following six steps (Luftman and Brier, 1999):

- 1) *Set the goals and establish a team*
- 2) *Assess the business-IT linkage*
- 3) *Analyze and prioritize gaps*
- 4) *Specify the actions*
- 5) **Select and evaluate success criteria**
- 6) *Sustain alignment*

The approach of Luftman defines in step five the selection and evaluation of the competences and success criteria for IT-business alignment. This project has focused on the performance of an ITO arrangement. The competences (for example leadership, processes and roles) of the organization create a potential competitive edge to which ITO performance contributes. The competences and success evaluation perspective has provided the context for the initial framework that will be explained in the next paragraph (2.2.3).

#### ABN AMRO Group Shared Services program (2004)

*"This major IT initiative enables us to deliver the 'fuel for growth' to support the required sustainable competitive growth for the bank. The agreements with selected suppliers allow us to utilise the latest technology to further improve the services we offer our clients. We expect that this IT programme that is shared across the Group will contribute to the savings in line with earlier estimates made by the bank, while improving IT services within the Group." Hugh Scott-Barrett, Chief Operating Officer and member of ABN AMRO's Managing Board about the 1.8 billion Euro program*

### 2.2.3 Initial project framework

The framework for this project has been derived from the four domains from Henderson and Venkatraman that have been explained in the previous paragraph (1993). The relations between these domains are depicted in Figure 2.10. Business strategy is considered leading for the IT strategy. The context of this has been discussed in paragraph 2.2.2, briefly summarized what is the use of perfectly arranged ITO arrangements versus a non-contribution of this to business. The IT strategy focuses on the long term contribution of the IT on the business objectives. This is operationalized by the services and activities that support the business operations. The business strategy will on the other hand provide a plan how business operations achieve the organizations' objectives. An IT capability only delivers actual value through implementation, in terms of the way it is used in improving the business performance. Both the intended improvement in performance and the way IT delivers or creates that improvement should be explicitly stated in the business and IT strategies. In the initial framework the ITO competencies are fitting within a model of the organization and its performance. It illustrates the relationship between business strategy, IT strategy, IT operations and services, business operations and performance. This framework emphasizes that business performance ultimately derives from business operations (the configuration of people, processes, structure, manufacturing, etc.) not directly from IT. Even though technology may be a core component without which business operations could not be performed. Direction and purpose for business operations is given by the business strategy. While shaping the IT or ITO strategy in terms of defining requirements, the business strategy is impacted the ITO opportunities provided via IT. As outlined in chapter 1.1 for ITO, related to that the IT strategy determines the 'what' and 'how' of IT and provides a blueprint for IT operations and services. The IT and ITO competences impact all four areas of the framework. The competences determine the extent to which IT and ITO opportunities are incorporated in the business strategy, the effectiveness of the business operations, how well the IT infrastructure is designed and resourced and the level of performance and quality achieved by IT operations.

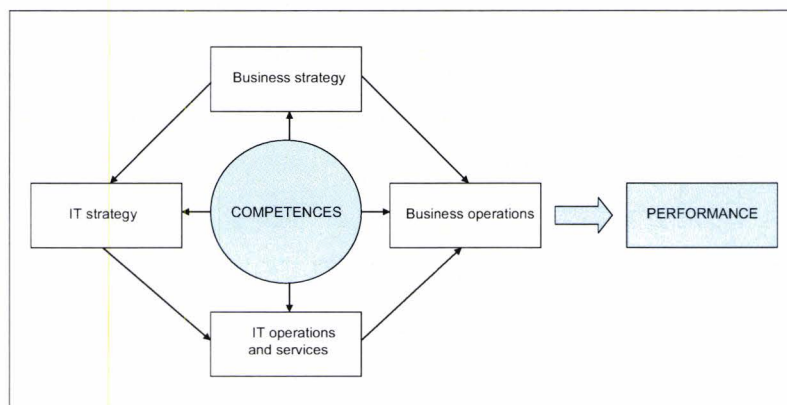


Figure 2.10 ITO performance framework (Ward and Peppard, 2003)

A weakness in any area of IT competences affects the overall IT capability and directly or indirectly impacts the business operations and ultimately affects the business performance. This is directly applicable for ITO, the performance or success of an ITO relation is affected by competence weaknesses. In the literature review 'weaknesses' have been discussed as risks and, on the other side, success factors (that might fail). This perspective integrates ITO success factors as essential component of the initial framework. This initial framework will be validated with the field feedback from interviews in chapter three to define the final project framework.

## 2.3 Conclusion

Chapter two has discussed ITO and concludes with the initial project framework. The first part has defined the context in which this project develops. The context has been structured in for example insight in ITO definitions, trends, objectives, justification and a review on success factors. The second part is the clarification of the ITO process. The process of outsourcing has been explained based on an outsourcing lifecycle model. At the end the initial success framework has been presented which will be linked to this process.

The ITO market will continue to grow, including IT as an essential part of Business Process Outsourcing (BPO) arrangements. The success of ITO as a strategy is hard to examine due to that before and after the situation factors could have changed tremendously. To express how successful an ITO arrangement has been in terms of cost, which is still the commonality, remains a challenge. The financial insight or cost transparency before ITO is often not known. Based on this lack of information a rigid evaluation of an ITO arrangement will not be possible. The advantages of ITO depend on the situation and capabilities of the sourcing organization (for example maturity, professionalism and processes). Although cost factors seem to be the most important factor to decide for ITO, the success depends on non-cost factors for example core competence management and stakeholder involvement. The organization's competences to manage an ITO arrangement are crucial for success, when entering the ITO arrangement. Organizations not used to manage ITO will have to be transformed from an operation to a performance managing organization. This change requires different competences to make ITO successful. The organizational changes will require different management styles. The attention of the (top) management is crucial to prevent failures and disappointments in ITO, because a lot of money is involved.

The review of the presented outsourcing paradigm by Gottschalk and Solli-Saether (2006) has provided a success factor list for ITO performance. This list of 'critical' success factors has been proven to be incomplete. Therefore it will be extended in the success factor analysis of chapter three with interview data. The list has been used as the template for the interview analysis. The template involves alignment with the business, which is crucial for ITO performance. Doing things right and doing the right things not only from an IT but also from a business perspective. ITO is considered as a crucial part of an IT strategy, IT operations and processes. An ITO arrangement without a business linkage is doomed to fail, in terms of contribution to the organization's business goals. The framework presented at the end of this chapter has captured the alignment and is considered as the initial project framework. In chapter three this framework will be validated and elaborates on the extension of the ITO success factors.

J.P. Morgan: the Pinnacle alliance

*"Information Technology is critical to J.P. Morgan's success; so critical and on so many specialized, fast-developing fronts that no one firm can be a leader in all of them. Teaming up with these firms will put us at the forefront of creative, flexible management of technology -- increasing our ability to exploit new technologies, manage costs and create competitive advantage. Douglas A. Warner III, chairman of J.P. Morgan (1996) about the \$2 billion 'Pinnacle alliance'*

### 3. ITO success from practice

Chapter three explains the methodology that has been used for the interviews and the data analysis. Internal (Philips) and external organizations have been interviewed to obtain an open insight in ITO success factors. This has resulted in forty-five factors that will be explained in the context of the assessment framework. Finally the initial framework of the previous chapter has been validated with the interview data, which has resulted in the revised framework.

#### 3.1 Methodology of the interviews

The objective of selecting interviews as the data collection methodology for the project has been two fold. The first objective has been to collect data of the ITO success factors. Secondly the interview data has been used to verify the initial framework that has been explained in chapter 2.2.3. The set-up of the interviews has been semi-structured. This means that a schedule of (usually) open questions has been used during the interview, with the possibility to deviate from these questions. One of the reasons for selecting this interview style has been that on the forehand it was not known which ITO experiences the approached ITO experts had. Semi-structured interviews have been applicable in this situation, because these can be considered as guided discussions. The discussions have been triggered by the open questions, where new questions were allowed to rise as a result of the discussions.

Although there is no perfect number for interviews or case studies, research recommends using about six to ten organizations (Elram, 1996; Eisenhard, 1989). The sample of the interviews for this project complies with this research recommendation. A long list of ITO organizations has been made from World Wide Web information, from the supervisor- and personal network. The selection from a long list to come to the short list has been based on supervisor expertise, availability of the experts and personal knowledge. In Annex D an outline of the interviewed organizations has been provided. Ten large organizations have been selected to participate in the interviews. These organizations were known to find themselves in an ITO trajectory. The interview group represents a fairly large part of the total population of large Dutch organizations that either outsourced their IT or was responsible for the ITO arrangement. In the interviews ITO arrangements have been discussed from three organizational perspectives (see Figure 3.1). The first perspective is the source or customer organization. In this interview group objectives and definitions of success from a viewpoint of the customer organization have been discussed. The second perspective has been formed by the outsource organization or supplier. The interviews in this group have provided insight in the objectives and success factors of the other 'half' of the ITO relationship. The third perspective or interviewed group was the ITO advisory or consultancy organization. The consultancy parties have been interviewed in the role as ITO strategy advisor or integrator. The number of organizations in each group has been balanced, to create validity in the interview data.

The interviews have been conducted at the organizations' location. The participants have not received the complete overview of the questions prior to the visit. This has been done so as not to influence the openness of the discussion. The interviews have been recorded digitally to ensure a complete report. During the interview process it has been noticed that, heading to the end of the interview list, no remarkably new success factor content was discussed. The final interviews (2) have therefore been restructured to verify the interview data collected in the previous interviews (8) and to discuss the ISFA framework. After conducting all interviews the final analysis for the report has been made, including the feedback of evaluation model discussions. To assure the validity of a case-study research, or in that matter any social science method, four common logical tests are relevant (Yin, 2003):

- *Construct validity*: establishing correct operational measures for the concepts being studied



- *Internal validity*: establishing a causal relationship, whereby certain conditions are shown to lead to other conditions, as distinguished from spurious relationships. In this exploratory research, the internal validity is not applicable
- *External validity*: establishing the domain to which a study's findings can be generalized
- *Reliability*: demonstrating that the operations of a study, such as the data collection procedures, can be repeated, with the same results

Besides logical validity tests, there are validity challenges regarding the interviews (Yin, 2003):

- *Bias*: to prevent poorly constructed questions, the first interview has been conducted as a pilot interview, from which unclear questions could be rephrased
- *Response bias*: the interviewee knowledge of ITO in their organization has been more than sufficient. The interviewee has been asked to represent the organizational opinion
- *Inaccuracies*: each interview has been digitally recorded. The interviews have been cross analyzed to prevent any inaccuracies
- *Reflexivity*: the open questions have prevented the effect that an interviewee provides answers that the interviewer wants to hear. Next to that the interviewer has anticipated due the knowledge that this phenomenon exists

In addition to these countermeasures, the interviewer has asked the organizations to provide financial reports and other related documents. This information has been used to improve the validity of the interviews. The provided data has been validated by the use of triangulation. Three sources of information have been used to verify interviewee statements on success factors. The sources are the literature review, available documentation of the interviewed organizations and the interviews itself. The interview process followed is depicted in Figure 3.1.

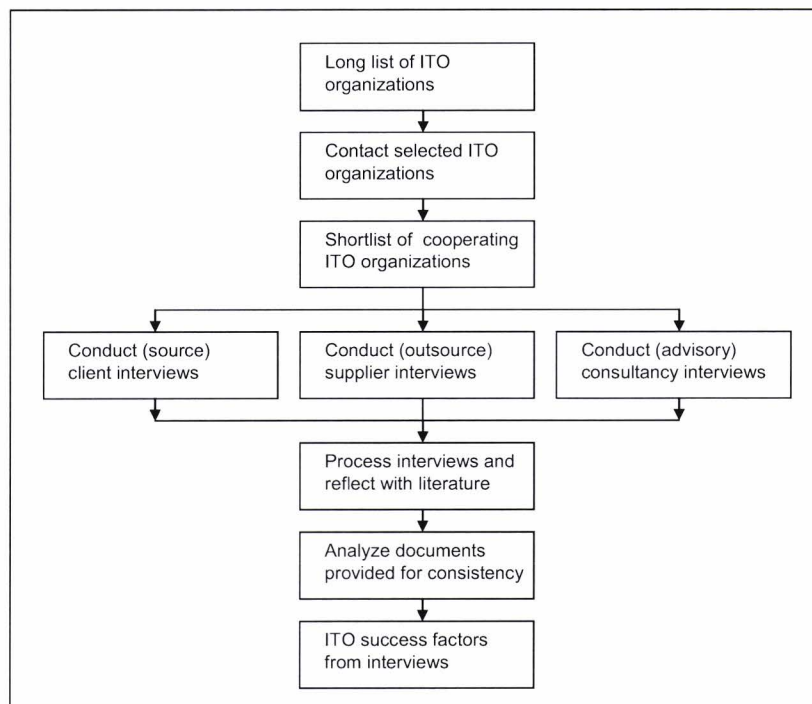


Figure 3.1 Structured interview process

In chapter two (Figure 2.1) IT services have been outlined in four clusters. IT services have been selected for the project scope. The questions and discussions in the interviews have focussed on IT services outsourcing. The reason for selecting IT services is that they are more and more subject to ITO, considered complex and for sure not all perceived as commodity (but as strategic

outsourcing). Analyzing the literature and the field feedback, commodities belong to the preferred list to be outsourced.

To be able to report the collected data in a logical context the project has selected a compiled feedback structure instead of on the individual interviewee based. This methodology is based on the grounded theory approach (Strauss and Corbin, 1998). This approach starts with an open perspective and does not presuppose much theoretical pre-understanding. This perspective has provided a template to obtain the success factor list. A cross organization perspective (sourcing, outsourcing and advisory) analysis has been performed to prevent incorrect interpretations. The presented list from the analysis of the interview data has been verified with the literature review. A clustering of factors has been made to be able to analyse the forty-five success factors. This has resulted in eleven success clusters or competences and their related success factors. Finally the interview analysis has resulted in a ranking of the success elements from one (most important) to eleven (less important). The list can be found in Annex E.

### **3.2 Interview results**

This paragraph elaborates on the extended ITO success factor list that has resulted from the expert interviews analysis in addition to the literature review. For readability the interview data has not been reported in detail. Besides that the data captures many aspects that are very interesting but not relevant for this research and therefore not worth while explaining here. The complete success factor list has been the deliverable of the analysis.

#### **Why organizations choose for ITO**

*Source organization* interviewees' answer to the question "why would you outsource IT services?" is cost reduction. Organizations that operate in hard markets with small margins are forced to look at outsourcing opportunities that could result in cost reduction. The aimed result of ITO is to increase profitability on the products or services sold. This reason though is certainly not limited to only these market operating organizations. Since IT in business is playing more and more a predominant role are cost of IT rising. Organizations explore ITO as a means to manage these costs to an acceptable level. An associated reason with reduction has been mentioned cost transparency. The complexity of IT services in the source organization could be very high. Many people and assets are involved in the service provisioning process, but there is limited or no insight on the cost of the service. This reason can be considered as a risk, the cost drivers to build an ITO business case should be known upfront. If this is not the case, decision taking on the goal of cost reduction will be hard. Core competence management has been mentioned by the interviewed source organizations as one of the main reasons for ITO. Organizations more and more focus on what the business drivers are and plan in how to excel in those. IT services as a competence is in most organization considered as a non core competence and therefore selected for ITO. Interesting to see is that IT services within a banking organization could nowadays be considered as core competence. Think for example of the internet banking activities, which are today a major part of the banking business. *Outsource and advisory organization* interviewees have stated that the reason for outsourcing should be core competence management. IT services are considered a core competence of an ITO provider, or supplier. From that perspective the outsource organization should be capable to deliver IT services at higher quality and performance at (least) equal cost.

#### **What of IT has been decided to outsource**

*Source organization* interviewees' answer to the question, what would you outsource, that in the process of ITO an assessment has to be done. With the assessment the organization should collect data that is needed for decision taking on ITO. For example what are the services we are talking about, how (well) is it organized, what are the business and IT strategies, is it a commodity, etc. See annex H for an example of this, which has been provided by an interviewed Chief Purchasing Officer (CPO). All interviewees answered that IT commodities are good options for outsourcing, other activities should be very well considered before transferring to an external

provider. ITO should not become a container for services that are not performing well. This will bring large risks in for example rising cost of services due to unclear requirements.

*Advisory organizations* state that a clear business strategy should be in place. Next to that the IT strategy is essential to have linkage with the business and visa versa. The goals to be achieved with ITO should be aligned with the business goals or drivers. The alignment of the strategies will contribute to the operations performance of the ITO arrangement.

### How to outsource the selected IT

*Source organization* interviewees' answer to the question "how would you outsource?" professionalize first. Garbage in garbage out, only outsource IT services that are well structured and performing. According to the interviewee this is crucial for success. Take time to negotiate a detailed contract, strive for a win-win solution. With this has been meant that both parties should benefit from the agreement. If cost has been thriven to a minimum the risk will occur to experienced in poor service quality. The supplier will not provide their best resources on the arrangement to be able to make a reasonable margin. Trust in a relation, willingness to share knowledge and the intention to invest in dedicated assets are mentioned examples of important cultural relation fit aspects.

### 3.3 Revised success framework

In the methodology discussion of this chapter the validation of the initial framework has been mentioned. The discussions and data obtained from the interviews have resulted in a revision of the project framework. The framework that has been adopted, based on practice insights, is depicted in Figure 3.2. The initial framework has been extended to a two organizations perspective. ITO performance is now reflected from both the source as well as the outsource organization. The reason for this is that an outsourcing relation of any kind involves always (at least) two parties. In this study on the performance of ITO, the success factors of both the internal as well as the external organization have to be assessed to be able to examine the performance bases on success factors of an ITO relationship. A well placed statement of an interviewed Senior Vice President is *'It takes two to tango!'*

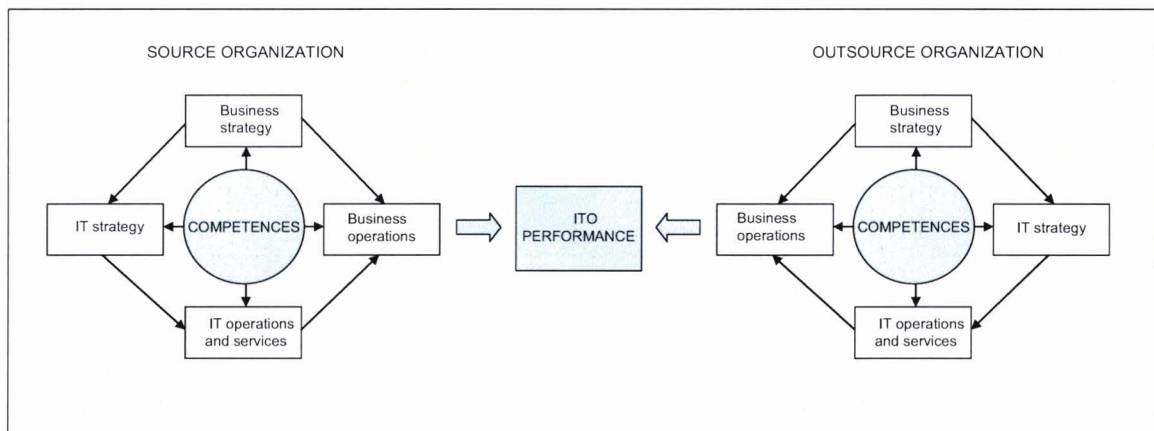


Figure 3.2 The revised framework (Wennink, 2007)

The framework extension reflects practice that not only the sourcing organization has to assess the success factors of ITO, but also the outsourcing organization. The data gained from these two assessments should be collected and analysed. The correlation of the evaluation coming forth this can be statistically validated. This test has been embedded in the assessment tool and will be explained in the next chapter, how to assess ITO success.

### 3.4 Conclusion

Chapter three outlines the used methodology to gain field data on ITO success. Semi-structured interviews have been conducted. The interview data has been analyzed and structured according to the grounded theory approach. An extended success factor list has been obtained from the interview data and literature review. To be able to process, the forty-five (45) factors have been clustered in eleven clusters. The clusters have been ranked based on the interview data. This has resulted in the final ITO success factor list as a component of the project framework.

The interviewed ITO experts have stated that cost is considered as the most important reason to opt for ITO. But on the other hand cost is absolutely not the most important ITO success factor. The organization's competences, for example core competence, have been stated as the most important success factor. The combination of success factors has been recognized and emphasized by the interviewed organizations. Managers considering combinations are aware of a relationship problem in case they occur. This will make them able to handle before they result in a no success situation. Do not underestimate the complexity of an ITO arrangement, knowledge of IT services and IT outsourcing should be kept in-house. This is necessary to be able to manage the relationship. In any ITO case a sourcing strategy is essential, for example the exit strategy when arrangements have expired, or to prevent only focusing on the economic impact, the core competence and the maturity of the relationship.

The initial framework has been discussed in the interviews. The importance of success in an effective ITO relation will reflect both customer and supplier organization. The parties should mutually be able to depend on each other and preferably try to achieve a win-win situation. The win-win relation will result in best quality of services and prevent margin forced activities that harm the performance. This has resulted in the revised project framework. Both sides in the relation should be assessed for success. The next step is explained in chapter four, the development of the framework in a diagnostic tool with an example ITO case. A round table ranking session and additional outsourcing experts have contributed to the validation of the framework which is also discussed in the next chapter.

ING: multi supplier ITO arrangement

*"By creating the preferred supplier team, ING is one of the first European companies to employ a multi-supplier ITO arrangement where each supplier provides a part of the overall service, coordinated by a service integrator, a critical element of Accenture's overall infrastructure delivery model. This strategy, whereby governance, service management and supplier management are all part of the service integrator's role, will enable ING to adapt quickly to change and to incorporate innovative processes and technologies, creating a competitive advantage that could go far beyond pure cost savings." Senior executive Edwin Van der Ouderaa, Accenture financial services (2006)*

## 4. How to assess ITO success

The final phase of the project is the development of the ITO Success Factor Assessment tool (ISFA). This tool enables success factor assessment of ITO arrangements. The first paragraph explains the ISFA framework. The second paragraph elaborates on the validation of this framework. Paragraph three introduces the ISFA tool and paragraph four provides an assessment example case to explain the possibilities.

### 4.1 Detailed ISFA framework

In the previous chapter the ITO success factor list and the revised framework have been explained. The success cluster evaluation has been discussed, based on the interview data and the literature review. This has resulted in the default cluster rank of one (most important) to eleven (less important). The rank has been based on the evaluation that has been performed on all forty-five success factors (Annex E). The revised framework has been named the ISFA framework. The success factors are the key component in the ISFA assessment framework. The success factor clusters are depicted in Figure 4.1 to clarify this. The ISFA framework shows that the clusters have been positioned twice. The double positioning has addressed the importance to assess at both sides of the relation (at least two organizations). The numbered clusters have been depicted as a star either in a 'box' or on an 'arrow' in the framework. This has been done to differentiate between clusters specifically related to a domain (for example cluster (4) to Business strategy) or to multiple domains (for example cluster (1) to all domains and therefore in competences). The positioning in the ISFA framework can be discussed from different perspectives. These cluster positions in the ISFA framework have been based on the data analysis of chapter three. If a cluster difference in the ITO relation position this has been explained.

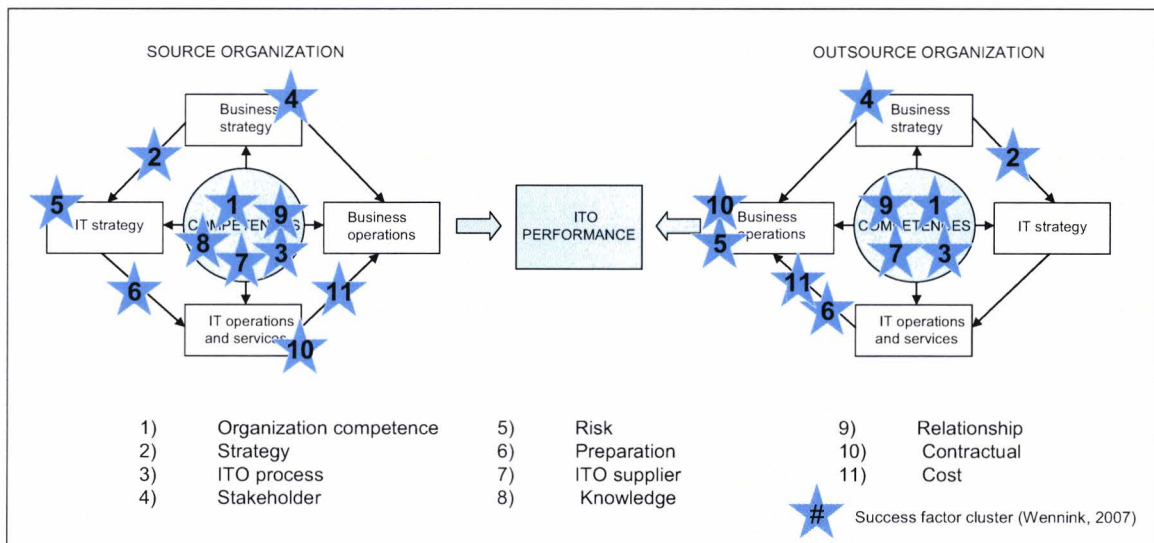


Figure 4.1 The assessment positioning in the ISFA framework

(1) *Organization competence* has been positioned in the competences domain. The reason is that the cluster success factors like governance, management involvement and core competence are assessed from all the domains. This affects both strategies as well as the operations perspectives. (2) *Strategy* cluster success factors have been positioned in the Business and IT strategy domains. The assessed success factors, defined as the long term plans of action for IT and business, are applicable for both strategies. This is the reason that it has been plotted between IT and Business strategy. (3) *ITO process* factors have been positioned in the competences domain. The reason for this is that the cluster factors like multidisciplinary team,

communication and people (including HRM) are related to and will be assessed from all domains. (4) *Stakeholder* has been positioned in Business strategy box because this cluster addresses what to achieve from a business perspective. Both sides in the relation assess this factor from a business strategy perspective to be able to perform on these cluster factors (for example the shareholder satisfaction). (5) *Risk* cluster positions in the relation are different. Risk has been plotted in the IT strategy box at the source organization. On the outsource organization, risk has been positioned in the Business operations box. The reason for this difference is that from the ISFA perspective ITO risk (assessment) has been captured in the IT strategy of a source organization. At the outsource organization risk has been positioned at Business operations domain where it is assessed and managed (to perform well and make profit). (6) *Preparation* also shows a different position in both organizations. The preparation clusters at both organizations have been defined differently. The source organization is preparing, from a total IT organizational perspective, for the specific ITO transfer to a retaining organization. This has been the reason for the position between IT strategy and IT operations. The outsource organization prepares the transition in the arrangement from an operations perspective and has therefore been positioned between business and IT operations (for example the adoption of assets). (7) *ITO supplier* has been positioned in the domain competences. The reason for this is that the majority in this cluster involves competence success factors like maturity, flexibility and capacity that impact all domains. (8) *Knowledge* has been in the success factors specifically defined applicable for the source organization IT domains (see Annex E). For this reason it has been positioned between IT strategy and IT operations of the source organization. The definition of knowledge at the outsource organization has a different meaning (see Annex E). This factor has been defined in the ITO supplier cluster. (9) *Relationship* has been positioned in the competences domain because this cluster contains factors based on communication and capability that are addressed in each domain of the framework. (10) *Contract* has been positioned at Business operations at the outsource organization. This is different at the source organization where it has been positioned in the IT operations domain. The reason for this is that the contract will be managed from these domains. (11) *Cost* cluster success factors are related to all operational domains and have therefore been positioned between IT and Business operations of both organizations.

The ISFA framework application is related to the OLM model, depicted in Figure 4.2 (see also chapter 2.1.2). The reason for addressing this is that the success factors have to be assessed according to the ITO process. In the interviews has been confirmed that the assessment outcome will depend on the phase of ITO. The impact or relevancy of the success factors has to be assessed per OLM phase. This project has analyzed the success factors from the initial Architect phase as the oval presents. The success factor definitions have been based on IT services.

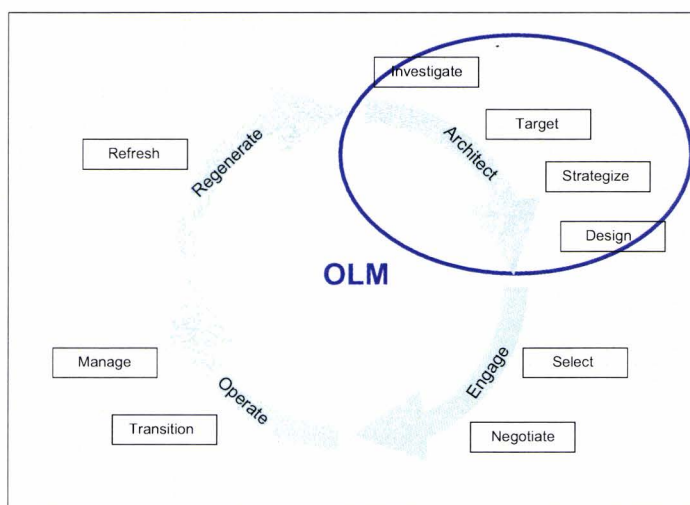


Figure 4.2 ISFA analysis phase of the OLM

## 4.2 Validation of the ISFA framework

To validate the detailed ISFA framework expert sessions have been organized. A project presentation has been prepared for these sessions with a clear scope and goal explanation of the validation. This presentation has guided the validation session(s) to align the participants' interpretations of the ISFA framework. The participants have been requested to apply their evaluation on generic IT services outsourcing and within the Architect phase. The reason for this has been that the project default ranked list of the success factors has been evaluated from this perspective. Two groups of experts have been invited to participate. The selection of the experts has been based on their knowledge of ITO, experience in IT services outsourcing cases and their global IT sourcing or strategy responsibility. The first group has represented the source organization and the second group the outsource organization(s).

A round table session has been organized for the sourcing group validation. The benefit of this type of session is that it provides the opportunity to afterwards plenary evaluate and discuss the obtained data. The invited experts in this session have not been involved in this project to prevent reflexivity. This enforces the objective to independently validate the ranking of the ITO success factors. After the individual rankings have been gathered, the plenary discussion has taken place to evaluate the data. This has resulted in a final source validation rank. The rank of the experts has been tested with the Rank correlation coefficient of Spearman (see annex G). With this coefficient the hypothesis has been checked that the ranking of the source organization experts agrees, with a least 95% reliability, with the default ranking. Figure 4.3 shows the result of the sourcing expert session. A spider web presentation has been used to visualize consistency in the ranking. The one hundred percent match would provide identical spider web diagrams. Therefore the plot has to be analyzed at large figure differences, for example spikes.

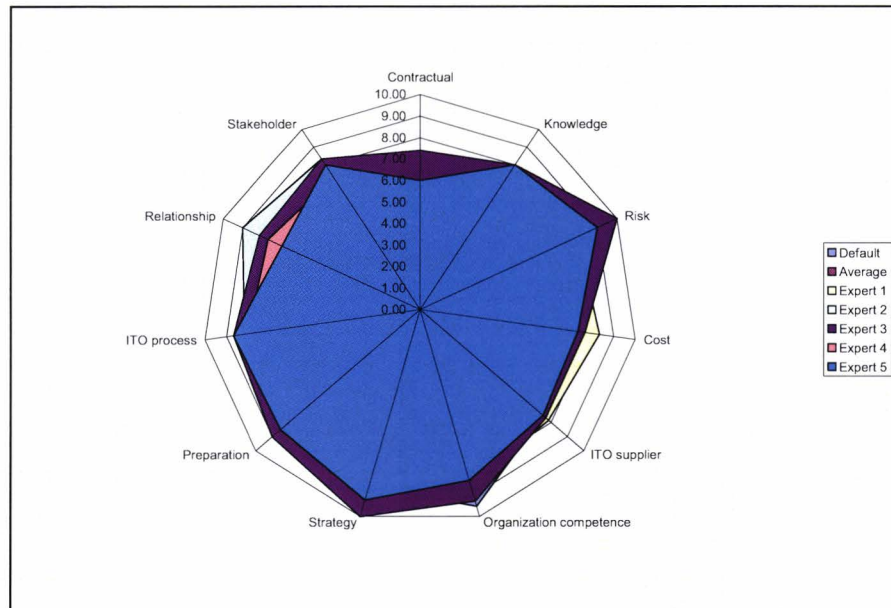


Figure 4.3 Sourcing consistency on ITO success factors

The individual expert charts show a large overlap. It can be concluded from this that the sourcing ranking has shown consistency between the expert opinions. The deviation in the Spearman test has been set at a maximum of three, e.g. as can be seen from the web presentation Expert two has ranked '9' and Expert five has ranked '6' on Relationship. This is considered an acceptable difference to be able to evaluate the average values with the Spearman test. From practice this has been considered an acceptable level. The Spearman test has proven that the sourcing session data has been 97.5% reliable compared to the default ranked list. Therefore the tested

hypothesis on the validity of the ranking has been accepted (since the test pass has required 95% reliability). Conclusion is that the default rank has been recognized in the sourcing session.

A second group has performed a validation from an outsourcing organization perspective. An equal number (5) of external experts has been requested to evaluate the success factors in the ISFA tool. The external experts have been selected on their activities in the IT services outsourcing business in addition to the conditions that have been specified for the sourcing group selection. The aim has been to select a group that could be in an IT services outsourcing relationship with the sourcing organization. The participating experts are employed by different outsource organizations. Therefore the evaluation had to be performed on an individual level. The project presentation has been provided to align the scope interpretation of all participants. The results of the outsource evaluation have been compared with the sourcing organization, between the outsourcing organizations and the project default evaluation. The results have been shown in Figure 4.4. The first observation from the charts is that outsource organization evaluation differ tremendously between the assessed organizations. The spikes in the spider web presentation clearly show large differences in the assessment outcome. The Spearman rank test has also been applied and provides, due to these large differences, five non aligned outcomes.

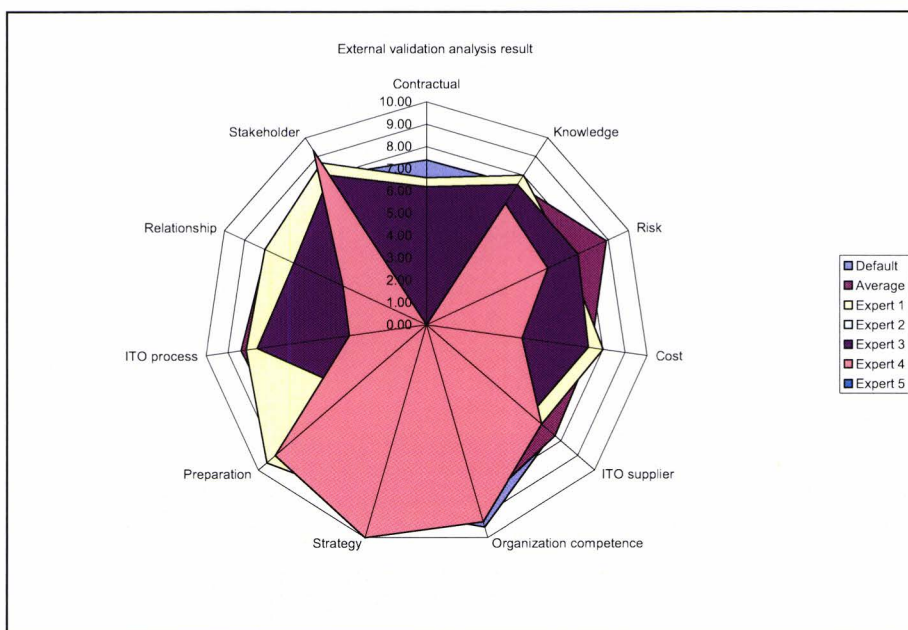


Figure 4.4 Outsource consistency validation on success factors

From the validation results it can be concluded that, within the participating source organization, the alignment on the success factors is very good. The invited experts in the round table session work for the same company. According to the experts the organizations' collaborative environment has contributed to the shared vision on the success factors. A different situation appears when the organizations are not organizationally related to each other. In this case the participating outsource organizations are competitors in the Dutch IT services outsourcing market. Different organizations, though in the same market, have shown a lot of differences in their evaluations. The conclusion from is that an assessment has to take place within an ITO project relation on a single organization basis. The outsourcing team has to be assessed on their success factor evaluation. This evaluation presents data for analysis of the aimed relation. The data provides insight in a difference or even a misalignment in the success factor evaluation. In that situation discussing or reconsidering having a relation with this outsource organization is highly recommended. Chapter five will provide recommendations for the further validation of the ISFA tool by follow up case study research.



### 4.3 The ISFA tool

The ISFA framework has been validated in the previous paragraph. The evaluation of success factors has been based on this framework. The assessment should be provided as an accessible instrument for the participants and the assessor. Therefore an automated diagnostic tool has been developed, the ITO Success Factor Assessment tool (ISFA). The functionality of the ISFA tool will be explained based on an ITO case example in paragraph 4.4. The process of assessment has been defined in three ISFA phases:

*The individual evaluation* or 'default' evaluation is the first phase of the ISFA. The project default ranking is recommended as the IT services industry standard evaluation. The evaluation on ITO success factors of an individual will be assessed in the Architect phase. The default ranking is used to test the correlation of the individual evaluation with the industry standard.

*The team alignment evaluation* is the second phase of the ISFA. The verification of alignment of the (out) sourcing team vision on ITO success factors in an ITO case is assessed. The evaluation of all team members on the defined factors are assessed with the ISFA tool. The results of the ISFA should lead to a discussion to come to a team alignment and understanding in this ITO case. The default ranking is used to test the correlation of the team evaluation with the industry standard.

*The relation alignment evaluation* is the final phase of the ISFA. The source and the outsource organization(s) or teams are requested to provide their evaluation input. The analysis with the ISFA tool provides both graphically and statistically the results of the relation alignment or fit on ITO success factors in the arrangement.

The ISFA tool has been implemented in Microsoft Excel and consists of two elements. The first element is the ISFA evaluation sheet (see Annex I). This has been developed as a core component of the ISFA tool which can independently be distributed to the involved people for an ITO assessment. The evaluation sheet is used for the collection of the evaluation data and automatically performs the Spearman rank test on the entered values per success cluster. The second element is the ISFA master file. This is used for the assessment phases two and three. To clarify the steps in the ISFA phases a flow chart has been produced (Annex J). The assessor will collect the evaluation data from the sheets and enter these manually in the ISFA tool. The tool automatically calculates the averages, the deviation and performs a Spearman test. The factors and cluster ranking are automatically plotted in a spider web presentation and the Alignment Quadrant. The ISFA Alignment Quadrant will be explained in the assessment case example in the next paragraph. The spider web presentation has been shown in the validation chapter and will also be used in the case example. The assessment from a relation alignment perspective provides insight in the success factor evaluation of all involved organization in an ITO arrangement. The expectations of both parties, regarding success factors, are analyzed. The relation analysis of the ISFA should be interpreted from a (cultural) 'fit' or 'no fit' outcome. In Figure 4.5 the assessment alignment has been depicted in green or red. At the red evaluation reconsidering having a relation with this outsource organization is highly recommended.

Assessment	Result source	Result outsource
1	NO FIT	NO FIT
2	FIT	NO FIT
3	NO FIT	FIT
4	FIT	FIT

Figure 4.5 Evaluation of an ITO arrangement (relation)

Refresh assessments in the phases explained above are strongly recommended. In each phase in the outsourcing process the assessment should be performed. The default ranking has been scoped to the initial Architect phase of the OLM. The assessment results in the phases are expected to differ. New insights might lead to adjusted evaluations.

#### 4.4 ISFA case example

The ISFA framework has been developed in an easy to use and automated diagnostic tool. A case example will be discussed in this paragraph to explain the functionality of the ISFA tool. The selection of the IT services outsourcing case has been based on the assessment criteria. These criteria are that the case should involve IT services to be outsourced of a rather valuable size and it should be in the Architect phase of the Outsourcing Lifecycle process. The case assessment outcome has been discussed before publication with the sourcing manager and has been agreed to analyze anonymously in the report. Therefore the terms Customer and Supplier have been used. Besides the exercise of explaining the ISFA tool, this assessment outcome will be discussed with the involved (out) sourcing teams. First a brief introduction to the assessed case has been provided.

Desktop Local Area Network (LAN) services outsourcing, further called Case, involves the service provisioning of customer workspaces including the desktop environment (PC) and LAN connectivity. The case has been managed as regionally independent projects. The Benelux region has been selected to assess for practical reasons. This regional project has covered an essential part of the total workspace environment of the Customer. In workspace terminology the numbers are called ‘seats’, which involves in this case an estimate of 20’000. Figure 4.6 shows the Case provisioning framework based on the factors cost, availability and speed (flexibility). The objective of the Case is to provide the Customer with an ITO solution that will be performing, providing fast, efficient and easy-to-experience support to accomplish business results.

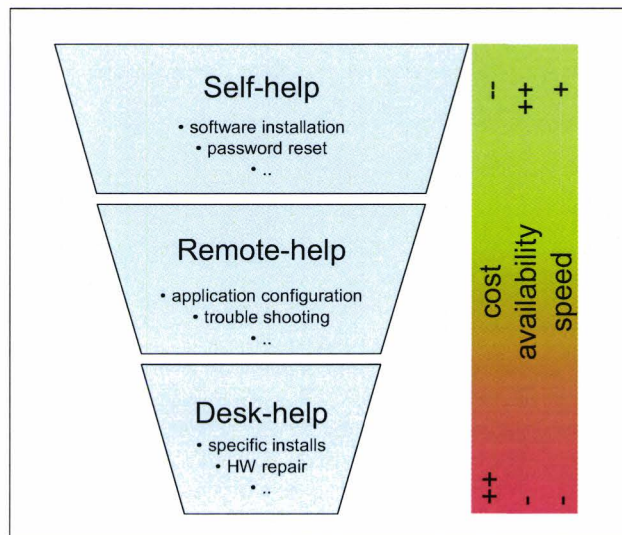


Figure 4.6 Case service provisioning framework

Performance of the services has been defined as providing adequate levels of support, flexibility, agility, security and overall capabilities. This should lead to defined levels of end user satisfaction and business efficiency. The price factor has been mentioned in the context of Total Cost of Ownership (TCO). The aimed benefits are for example trust-based cooperation, shared service infrastructure, rich communication and optimal use of the resources. The process steps of the Case assessment have been explained by discussing the assessment results. The results are used to show the functionality of the ISFA tool. As explained in the previous paragraph the

evaluation phases are the individual, the team alignment and the relation alignment. The evaluation input has been collected with the ISFA Evaluation Sheet, as shown in Annex I.

**Assessment phase one: the individual evaluation**

The first ISFA phase is the individual evaluation of the sourcing manager of the Case. This evaluation phase requires that the Case is in the Architect phase of the OLM. The default ranking has been validated for the use in this phase to assess the individual rank result. The example case has already entered the Engage phase of the OLM because the contract has recently been signed. Interesting for the project is to explore if the individual rank will differ (as expected) from the default rank. This is tested with the Spearman rank correlation which is integrated in the ISFA tool. The test automatically shows the hypothesis result (H0: no rank correlation and H1: rank correlation). In case the reliability in the test has not met the criteria (e.g. 95% reliable) H0 will be rejected and the box is automatically coloured red. If the rank shows correlation according to the test then H1 is accepted and automatically turns green.

Clusters	Default	Individual	$D_i$	$D_i^2$
Contractual	10	11	1	1
Knowledge	8	5	-3	9
Risk	5	10	5	25
Cost	11	2	-9	81
ITO supplier	7	4	-3	9
Organization competence	1	8	7	49
Strategy	2	5	3	9
Preparation	6	1	-5	25
ITO process	3	2	-1	1
Relationship	9	5	-4	16
Stakeholder	4	9	5	25
				250
Number of elements	11			
rs	-0.14			
Reliability	95%	97.50%	99%	99.50%
Reject H0 if rs <	0.523	0.623	0.736	0.818
Spearman result	H0	H0	H0	H0

Figure 4.7 The Case individual evaluation versus default

The result of the individual evaluation has been shown in Figure 4.7. From this ISFA evaluation has been concluded that the Individual evaluation does not agree (at all:  $rs = -0.14$ ) with the default. Zooming in on the evaluation results has shown large differences in the rank, for example the most important default cluster (1), organization competence, has been ranked at the 8<sup>th</sup> position for the Case. The assessment has been performed on an individual basis and provides the opportunity to gain insight in the complexity of ITO and its success factors. The current phase of the arrangement has not been the required default phase. Therefore the differences have to be discussed and validated from an Engage default rank perspective. This has been recommended as case study follow up research. The next phase of the Case assessment is the team ISFA evaluation.

### Assessment phase two: team alignment evaluation

The second ISFA phase is the team evaluation of the Case. Within this phase the ITO team alignment has been assessed. The alignment evaluation is a crucial element of the ISFA. The ISFA tool has been developed to process the evaluation input of teams up to 50 (!) members. The deviation in the evaluation results has to be analyzed to prevent that the calculated evaluation averages are influenced, this will be explained. The ISFA evaluation sheets have been distributed to the Case team members. Both Customer and Supplier have provided their evaluation results. In total 18 individual evaluation requests have been send of which 11 have been replied (6 of 10 by Customer and 5 of 8 by Supplier). This is a response rate of 61%. The assessor has collected the evaluations and has copied these from the ISFA evaluation sheets into the ISFA master file (tool). This is done manually by copy pasting the entered values in the predefined fields of the tool. The ISFA tool then automatically provides the alignment results which have been shown in Figure 4.8. The assessor has to analyze the red and green box results. The red boxes address the deviation issue as described above. The maximum of deviation in the evaluation has been set at three. This has been validated as an acceptable level of the alignment in the evaluation results.

#	Succes Factor evaluation (Customer)	Min	Max	Deviation (>3)	#	Succes Factor evaluation (Supplier)	Min	Max	Deviation (>3)
1	Contract	4	10	6	1	Contract	7	8	1
2	Contract term	4	9	5	2	Contract term	7	8	1
3	Contract management	4	8	4	3	Contract management	7	10	3
4	Bonuses	1	8	7	4	Bonuses	4	8	4
5	Penalties	1	8	7	5	Penalties	4	8	4
6	IT knowledge	8	10	2	6	IT knowledge	5	8	3
7	Market knowledge	6	8	2	7	Market knowledge	6	7	1
8	Risk analysis	5	8	3	8	Risk analysis	8	9	1
9	Risk management	5	8	3	9	Risk management	8	10	2
10	Cost of services	6	9	3	10	Cost of services	5	8	3
11	Transaction cost	3	8	5	11	Transaction cost	4	8	4
12	Cost transparency	4	9	5	12	Cost transparency	4	10	6
13	Supplier selection	5	10	5	13	Supplier selection	7	8	1
14	Mature suppliers	8	10	2	14	Mature suppliers	8	8	0
15	Multi supplier approach	3	10	7	15	Multi supplier approach	3	4	1
16	Supplier capacity	7	9	2	16	Supplier capacity	6	8	2
17	Demand and supply	6	8	2	17	Demand and supply	6	8	2
18	Supplier flexibility	8	10	2	18	Supplier flexibility	6	8	2
19	Governance	6	10	4	19	Governance	7	8	1
20	Management involvement	6	10	4	20	Management involvement	8	9	1
21	Core competence management	5	8	3	21	Core competence management	5	9	4
22	Organization maturity	6	9	3	22	Organization maturity	8	10	2
23	IT strategy	5	10	5	23	IT strategy	5	8	3
24	Sourcing strategy	5	9	4	24	Sourcing strategy	6	10	4
25	Business strategy	4	9	5	25	Business strategy	5	10	5
26	IT-business linkage	0	9	9	26	IT-business linkage	6	9	3
27	Clear ITO scope	8	10	2	27	Clear ITO scope	9	10	1
28	Clear objectives	8	10	2	28	Clear objectives	6	10	4
29	Professionalism	0	10	10	29	Professionalism	7	10	3
30	Communication	8	9	1	30	Communication	7	10	3
31	Multidisciplinary team	6	10	4	31	Multidisciplinary team	8	9	1
32	Human resource management	4	10	6	32	Human resource management	8	10	2
33	Expectations management	7	9	2	33	Expectations management	8	9	1
34	People	6	9	3	34	People	6	8	2
35	Tender process	6	10	4	35	Tender process	6	8	2
36	Continuous relation management	5	10	5	36	Continuous relation management	8	9	1
37	Client flexibility	4	10	6	37	Client flexibility	6	8	2
38	Supplier management	7	9	2	38	Supplier management	7	8	1
39	Labour demarcation	5	8	3	39	Labour demarcation	6	8	2
40	Social exchange	5	8	3	40	Social exchange	5	9	4
41	Strategic positioning	6	9	3	41	Strategic positioning	8	8	0
42	ITO management	6	9	3	42	ITO management	8	10	2
43	Aligned stakeholder	7	9	2	43	Aligned stakeholder	7	10	3
44	Stakeholder selection	6	8	2	44	Stakeholder selection	4	8	4
45	Shareholder value	4	9	5	45	Shareholder value	5	7	2

Figure 4.8 Customer and Supplier team evaluation

Customer results have shown a tremendous deviation, 22 of 45 factors show a large difference in the evaluation results (almost 50%). Before entering the next phase of the ISFA the differences in the result should be discussed within the Customer team. An added value of this exercise is to gain insight in the total team evaluation of the success factors. The discussion that follows should have the intention to align the individual evaluations and to clarify the reasons for the deviation(s). This exercise will contribute to the team understanding and preparation for success in the ITO of the Case. Besides this the next ISFA phase requires an aligned team average. If the input for this phase is based on an evaluation with large deviations this incorrectly influences the assessment. Within the statistics the deviation analysis is essential to prevent misleading outcomes. For example an individual ranking of the factor Contract of 10 versus 4 would provide an average of 7. This adopted rank has not been verified as the aligned team average rank.

The Supplier results have shown a deviation at 10 of 45 factors, this is an aligned result of 78%. The discussion on deviation should lead also in this group to an agreed team average. The Supplier evaluation has shown that the deviation has been mostly '4', one '5' and one '6'. Analyzing Customer results a huge diversity in deviation has been found from '0' to '10'. A plenary discussion has been advised and agreed to clarify these differences. For the case example the result have to be discussed to enter the next phase of assessment. Because this discussion did not take place yet the (to be aligned) averages will be further used for explanation of the ISFA tool. The final part of the team alignment phase is the Rank Spearman correlation test of the team averages. The assumed Case team averages have resulted in the cluster ranks that are shown in Figure 4.9. The three correlation tests are similar to the individual test as shown in Figure 4.7. The main difference is that instead of one three relations are tested: Customer versus default, Supplier versus default and Customer versus Supplier. This last test is the relation correlation test on success clusters. The red and green boxes depict the rejection or acceptance of the hypothesis (H0: no rank correlation and H1: rank correlation).

Cluster	Default	Customer	Supplier	D <sup>2</sup> C vs D	D <sup>2</sup> S vs D	D <sup>2</sup> C vs S
Contractual	10	11	6	1	16	25
Knowledge	8	8	8	0	0	0
Risk	5	9	10	16	25	1
Cost	11	10	9	1	4	1
ITO supplier	7	7	4	0	9	9
Organization competence	1	3	1	4	0	4
Strategy	2	5	3	9	1	4
Preparation	6	6	1	0	25	25
ITO process	3	4	4	1	1	0
Relationship	9	2	6	49	9	16
Stakeholder	4	1	11	9	49	100
				90	139	185
Number of elements	11					
Reliability interval			95%	97.50%	99%	99.50%
Reject H0 if rs >			0.523	0.623	0.736	0.818
<i>Result Spearman test</i>						
	rs					
Customer versus default	0.59		H1	H0	H0	H0
Supplier versus default	0.37		H0	H0	H0	H0
Customer versus Supplier	0.16		H0	H0	H0	H0

Figure 4.9 Case team rank correlation

In case the presented results in Figure 4.9 would have been based on aligned team averages this result would be a reason for discussion. The ISFA tool presents that Customer evaluation shows a 95% correlation with the default of industry standard. The other two tests, Supplier versus default and Customer versus Supplier show a different result. The first outcome has been expected to differ because the contract is already in another OLM phase. The last test outcome should trigger anyone involved. The Customer versus Supplier test is represented by the tool as definitely a non aligned evaluation ( $r_s = 0.16$ )! This result definitely requires an analysis from a relation perspective what the reason is of this remarkable outcome. This result emphasizes the importance of the prerequisite team alignment which provides a reliable evaluation of alignment.

### Assessment phase three: the relation alignment

The final phase in the ISFA is the relation alignment. This phase provides the opportunity to assess an ITO case on average and detailed success factor level. The discussion that has been strongly recommended in the second phase has taken place (assumption). The result of this discussion has provided both of Customer and Supplier an aligned team average. The ISFA tool provides automatically a spider web presentation that shows the aligned team average success clusters. This presentation is recommended to be used for the team discussion(s) on the deviation. The default average has also been plotted in the web.

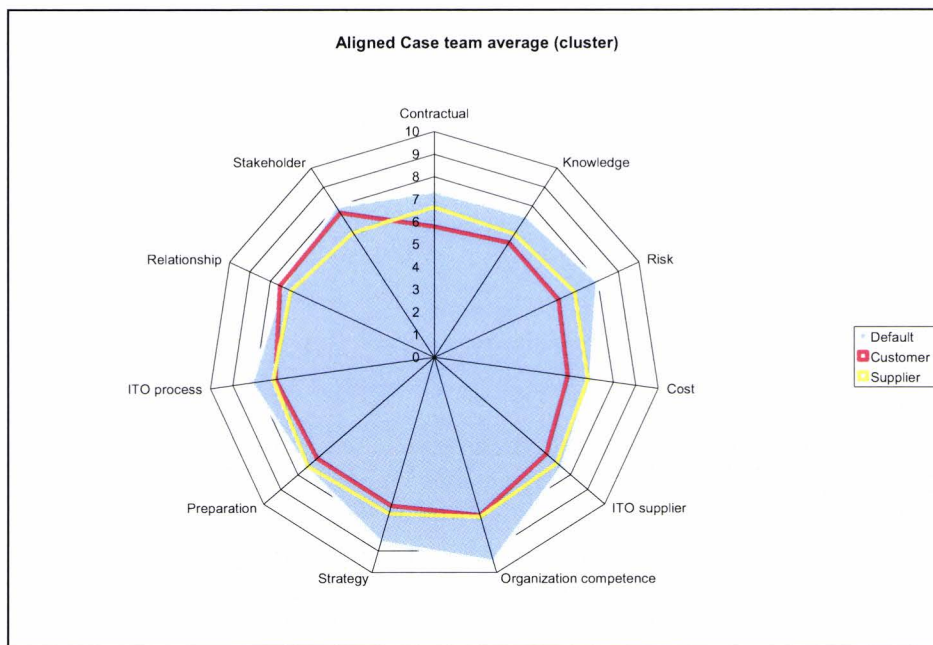


Figure 4.10 ISFA presentation of Case aligned team average

The cluster rank has been based on the evaluation of the success factors. For practical reasons not all forty-five factors have been plotted in the presentation of ISFA results. An integrated component of the ISFA tool is the Alignment Quadrant. This quadrant is automatically created in the ISFA tool when evaluation data has been entered. The unique value of this Alignment Quadrant is that it provides a very clear presentation of alignment on a success factor evaluation level (represented by the white ISFA arrow). The quadrant has been defined in domains called Aligned and Deviation (see Figure 4.11). The forty-five success factor evaluation averages are plotted in this quadrant which provides a very clear overview on deviation factors and aligned factors. In the case example five red circles have been drawn to address the factor in the deviation areas. These plots could involve multiple success factors, due to equal values, and have to be analyzed why these are according to the assessment not aligned. With this final analysis the alignment of the ITO relation has been assessed ('fit' or 'no fit').

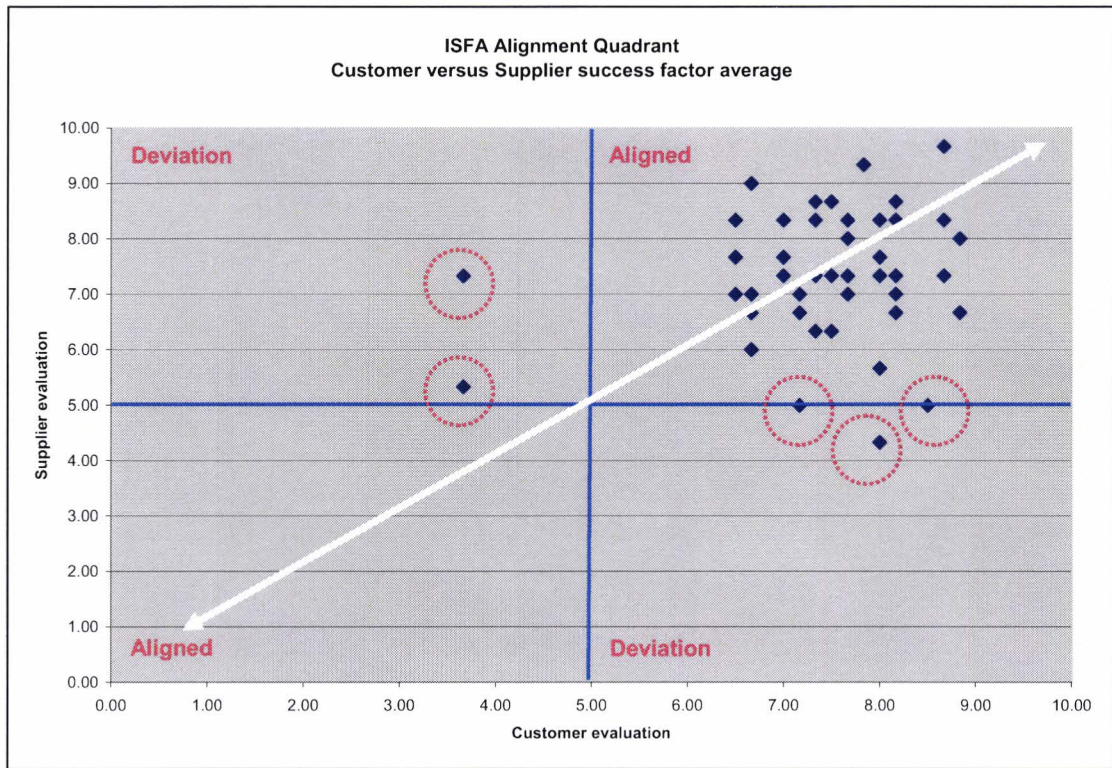


Figure 4.11 The ISFA Alignment Quadrant

#### 4.5 Conclusion

This chapter has elaborated on the ISFA framework and tool. The validation of the ISFA framework has confirmed that each ITO arrangement is unique. Due to the different organizations involved the relation assessment has to be performed in every single ITO arrangement. Because of this project all essential elements are available for an assessment. With these elements the easy to use and automated ISFA tool has been developed. Based on the ISFA framework it is possible to assess the success factors from an ITO relation perspective. The diagnostic tool provides three embedded assessment phases as explained with the example case in this chapter. The assessment outcome is related to the OLM phase of the ITO arrangement. This project has scoped the default rank of the tool to the initial Architect phase. The remaining three phases of the OLM are strongly recommended to be validated. The evaluation of the success factors should be performed frequently and at least in each phase of the OLM. The reason for this is that in an on going process new insights are gained.

The tool contributes to the alignment of ITO success factors. In the initial Architect phase the use of the tool provides the success factor evaluation within the customer sourcing team. For example multidiscipline differences in the sourcing team have resulted in deviation of assessment results and will be aligned. This has also been applied to the outsourcing team, because an outsourcing relation always involves (at least) two parties. In the process of outsourcing the tool contributes by assessing the success while managing an ITO arrangement. An initial assessment is important to provide early stage insight success factor evaluation. This evaluation should be renewably assessed in the outsourcing process to verify if it has changed. The use of the ISFA tool contributes to managing the complexity in ITO by providing a structured assessment with a detailed trigger list of success factors. The final part of this report is chapter five. The conclusion, the recommendations of the ISFA tool will be discussed.

## 5. Final conclusion and recommendations

Several thousand years Before Christ every family made its own pots, spears and arrows and hunted and gathered its own food. Some people were naturally more skilled at certain of these tasks than others. These people began to concentrate on their core competences for example weapon making and outsourced hunting to others. The principles of modern outsourcing can be said to have their roots in the recognition that there were economic benefits in specialization.

IT outsourcing or abbreviated ITO has been the subject of this project, specifically the success factors of ITO arrangements. ITO is still - seventeen years after the world-famous Eastman Kodak Co. deal - very prevalent. It is a phenomenon that will remain an essential part of world wide business. Examples of aimed ITO benefits that have stimulated the enormous growth since 1996 are lower cost, improved productivity, increased quality, higher customer satisfaction, time to market and the ability to focus more on core competences. During this growth not all ITO arrangements appeared to be successful. The question raised while observing this fact is why and what to do to prevent these failures? Reviewing existing literature has unfortunately not resulted in a clear answer to this question. Only a little research has been found on the topic of ITO success factors in relation with performance (or failure). Outsourcing is not often evaluated in practice which clarifies that hardly any evaluation data is available. The available detailed evaluation data has been based on the known successful ITO arrangements. The failures could be considered as a loss of face which might impact business directly and are therefore not published. ITO involves a lot of money, which means that failures are resulting in a tremendous loss of money. The world wide ITO market in 2011 has been forecasted by Gartner to be \$318 billion. In an ITO market of this pecuniary size and hardly any failures that are evaluated this involves billions of dollars being thrown away.

### The project questions

The huge loss of money resulting from ITO failures, the lack of evaluation of failures and only little literature research available have been the triggers for this project. Besides these facts the perceived unilateral way of evaluation is expected not to contribute to the success of ITO. While exploring existing literature related to these facts the main project question (MQ) has been raised:

*'What are the key success factors that determine the success of IT outsourcing (ITO) contracts?'*

In order to answer this question thoroughly sub questions (SQ) have been defined.

*SQ1: What is IT and ITO?*

Based on the literature review Information Technology (IT) has been defined as:

*IT is the study, design, development, implementation, support or management of computer based information systems, particularly software applications and computer hardware*

In practice the various functions in IT for example involve dynamic complex tools embedded in a core business process, a clustered service task performed by IT consultants or a computer used for email checking and writing documents. As organizations realize the need for the IT function, they are faced with the challenge to maintain a fully operational IT function within the organization. This is challenging because IT is often not a core competence of an organization. An organization's strategy on non core activities could therefore provide in a plan for ITO possibilities. The project has been scoped to outsourcing of IT services. The reason for selecting IT services is that they are more and more subject to ITO, considered complex and for sure not all perceived as commodity (but treated as strategic outsourcing).



Based on the literature review IT Outsourcing (ITO) has been defined as:

*ITO is a process whereby an organization 1) decides to contract out or to sell the firms IT assets, people and/or activities to a third party supplier, 2) who in exchange provides and manages these assets and services for monetary returns over an agreed period of time with an performance agreement*

An important difference between ITO and IT purchasing is that in ITO assets will be transferred to the outsourcing or supplier organization. Arranging and managing the contribution of an independent organization servicing the transferred assets requires different competences from the sourcing organization. From an arrangement perspective ITO has been discussed as a continuous circular process. This circle consists of four phases named Architect, Engage, Operate and Regenerate. The loop in this Outsource Lifecycle Model (OLM) will run continuously during an ITO arrangement. The reason for this is that the process of outsourcing will develop new insights in every phase. The new insights will lead to opportunities of optimization but will also benefit by the arrangement. This project has been scoped to the Architect phase where it all starts. The reason for this is that this take-off phase starts the (new) ITO arrangement where the assessment should be set up (as early as possible).

*SQ2: What are the trends in ITO?*

Since the moment Eastman Kodak Co. signed its 10-year 250 million dollar outsourcing deal with IBM Co. IT in 1990, outsourcing has been a hot topic of top management. Chief Information Officers (CIO) from other organizations jumped on the bandwagon. As discussed a Gartner study has shown a forecasted growth of 40 percent ITO spend world wide from \$227 billion (2006) to \$318 billion (2011). This growth has confirmed the trend that spending will continue to rise in all global sourcing markets. The major increase is expected in Business Process Outsourcing (BPO) including the process related IT. The suppliers are rapidly building capabilities to reap the benefits of this BPO growth by improving inefficient customer processes and functions. On the other hand the in-house operations are adopting the techniques of the (BP) outsourcing market, for example the use of Service Level Agreements (SLA) which stimulate the increase in quality of insourcing. In the phenomenon of outsourcing developing countries beyond India will become important players in the global business and IT services market. Highly educated resources at competitive conditions will be remotely available thanks to the quality of today's communication infrastructure.

An important trigger for this project is the ITO failures. These disappointments are expected to remain part of the business. Outsourcing will continue to be a high risk and a hidden cost process in organizations where: learning is painfully slow, in deals where suppliers do not make reasonable margins and when customers organizations do not strategize, configure, contract for, monitor and manage their deals effectively. On the other hand the failures will decrease at customers who will invest much more in contract management. Customers are recognizing that they need to understand and control the conditions under which their money is spent. This trend, discussing disappointments, emphasises the need for a rigid evaluation of ITO arrangements. The evaluation of failures will increase the probability of disappointments occurring.

*SQ3: What are the objectives for ITO?*

There are several reasons for organizations to consider ITO. Important is to clearly distinguish between objectives and success factors. Objectives are often confused as also being the success factors of the ITO arrangements. The correct interpretation is that success factors should be associated with the ITO objectives, to accomplish its intended purpose or outcome. The objectives have been defined in four categories. The first category is the Strategic objectives, for example core business, innovation and transformation. The second category is Economical

objectives, for example cost, control, risks and increased venture capital. The third category has been defined Operational objectives, for example quality, flexibility & capacity and transition. The fourth category is Emotional objectives, for example 'bandwagon effect', faith and uncertainty.

There are various theoretical justifications for ITO. The literature review has outlined a justification paradigm of eleven theories why ITO is occurring worldwide. The justification of what to outsource impacts the objectives. The paradigm reflects that first it should be known what to outsource to be able to define the ITO objectives and success factors.

*SQ4: What are the risks of ITO?*

An ITO arrangement that will be assessed on risk factors frequently and in which the risks are managed will have an increased probability of being successful. Examples of risks from ITO are dependency on the supplier, loss of control over the IT function (technology and direction), loss of technical skills, reduction in commitment, vulnerability of information and intellectual property, strategic vulnerability, potential for escalation of contracts (and costs), irreversibility of the decision, supplier lock-in, legal advisory and additional fees often ignored, long term ITO contracts may complicate future mergers and acquisitions. Associated to success are the risks that if unmanaged or not known could lead to an undesired outcome. Frequent risk assessment, acknowledgement and management are essential steps to prevent failures in ITO arrangements.

*SQ5: How to assess ITO success?*

The final sub question has provided an extra dimension to the main research question. The main question could have been answered by providing the ranked list of ITO success factors, but this does not really help organizations to prepare for and evaluate ITO success. The ranking would be too case specific and does not provide a method of assessing the ITO arrangement. Before answering this question the success factor list will be explained.

The ITO justification paradigm has provided insight in the key success factor(s) of ITO success. These theories have provided a list of eleven key success factors which has been considered incomplete. To complete this list interviews with ITO experts have been conducted at different source, advisory and outsource organizations. This has resulted in forty-five ITO success factors. For practical reasons the factors have been organized in eleven clusters. These are -in alphabetical order- Contractual, Cost, ITO process, ITO supplier, Knowledge, Organization competence, Preparation, Relationship, Risk, Stakeholder and Strategy. The success factors have been evaluated for a generic IT services outsourcing case which has resulted in a default cluster ranking. The evaluation has been scoped to the Architect phase of the Outsourcing Lifecycle Model (OLM). The result is a one to eleven importance between the defined success clusters. The organization competence cluster (1) has been ranked the most important cluster and cost (11) the least important (for this phase in the OLM). The validation has proven the rank to be depending on the type and complexity of the case, the organization and the phase of the outsourcing process.

ITO arrangements can be extremely successful, but what is the use of this success if the organization's business result is going zero or negative? Therefore it is crucial that ITO is closely linked to the business of an organization. ITO can contribute to the business very positively. An example that has been discussed in the expert interviews is increasing the business margins by ITO in the banking industry. On the other hand less successful ITO projects could impact the business negatively. The business-IT linkage has been considered a prerequisite for the project assessment framework. The development of the ITO Success Factor Assessment (ISFA) tool is based on the initial framework. The initial framework incorporates the essence of assessing an ITO arrangement on success factors from a business-IT perspective. The relation between business and IT strategies as well as the relations to operations and services are outlined in this existing framework.

Striking is that from literature only unilateral ITO evaluation frameworks have been found. Research on evaluation frameworks have been performed from either the ITO supplier or the customer but not from an ITO relation perspective. The initial framework presents this unilateral perspective. The knowledge gained in this project has resulted in the extension of this existing model into the revised multilateral assessment- or ISFA framework. The ISFA framework defines to assess the ITO success factors from (at least) two organizations (see Figure 5.1).

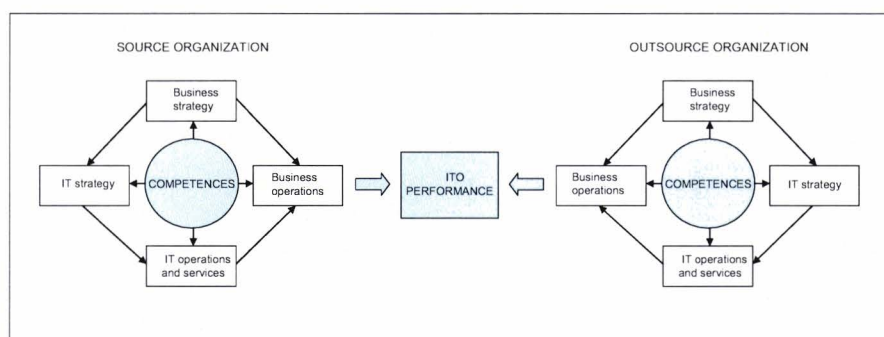


Figure 5.1 The ISFA framework

The validation of this framework has proven that each ITO arrangement in itself is unique. Due to the different organizations involved the relation assessment has to be performed in each and every ITO arrangement. Because of this project all essential elements are available for the design of a diagnostic tool. The easy to use and automated ISFA tool has been developed. Based on the ISFA framework it is possible to assess on success factors in an ITO relation. The ISFA tool provides three embedded assessment phases:

*The individual evaluation* or 'default' evaluation is the first phase of the ISFA. The project default ranking is recommended as the IT services industry standard evaluation. The evaluation on ITO success factors of an individual will be assessed in the Architect phase. The default ranking is used to test the correlation of the individual evaluation with the industry standard.

*The team alignment evaluation* is the second phase of the ISFA. The verification of alignment of the (out) sourcing team vision on ITO success factors in an ITO case is assessed. The evaluation of all team members on the defined factors are assessed with the ISFA tool. The results of the ISFA should lead to a discussion to come to a team alignment or understanding in this ITO case. The default ranking is used to test the correlation of the team evaluation with the industry standard.

*The relation alignment evaluation* is the final phase of the ISFA. The source and the outsource organization(s) or teams are requested to provide their evaluation input. The analysis with the ISFA tool provides both graphically and statistically the results of the relation alignment or cultural fit on ITO success factors in the arrangement. Trust in a relation, willingness to share knowledge and the intention to invest in dedicated assets are examples of cultural fit aspects.

*MQ: 'What are the key success factors that determine the success of IT outsourcing (ITO) contracts?'*

The main question remains to be answered. The developed ITO Success Factor Assessment (ISFA) tool provides the answer to main question. The project has delivered a structured list of the most important or key ITO success factors that is the key component in this tool. To determine the success of a contract or arrangement the (key) success factors should be frequently evaluated with the ISFA tool. The assessment is always ITO arrangement specific, depending of the phase of the arrangement and certainly has to be performed from a relation perspective: *'It takes two to tango!'*

### **Reflection on the methodology**

The project has used two methodologies for data collection, the literature review and semi-structured interviews. While exploring the interesting topic of ITO a lot of information has been found. Much existing research has elaborated on success and is scattered in diverse sources. Definitely an added value of this project to the existing research can be found in structuring this data of ITO success. This has resulted in the ITO success factor list and the developed ISFA framework that evaluates ITO success from a relation perspective. The ISFA framework is the extension of and an addition to the existing literature.

The aim of the interviews has been to extend the literature review findings. The advantage of conducting semi-structured interviews has been that a constructive process of feedback took place. The interviewees contributed to the data collection and also to the revision and validation of the project framework. To analyse interview data the grounded theory approach has been applied. To validate this analysis a round table session has been a valuable method. The plenary discussion in this session has resulted in an evaluation alignment and confirmed the default rank from a sourcing perspective. Due to the diversity of outsource organizations the external validation has been performed on an individual basis. For all validation sessions one uniform presentation has been provided upfront, to ensure an equal understanding of the agreed scope and assumptions for the validation. The rank results have been tested with Spearman's rank correlation coefficient, which tests for correlation between sequences of values. The results of this test have validated the default rank.

This project has aimed at exploring and assessing the success factors of ITO, specifically IT services outsourcing. A follow up study should be initiated to explore the success factors ITO generic, or even the possibility of assessing Outsourcing generic success factors with the ISFA tool. Existing literature does unfortunately not differentiate between conditions and outcomes of success. The project strongly advises for future case study research to clearly distinct these while performing assessments. To further validate the contribution and use of the ISFA tool assessment of multiple ITO case studies is strongly recommended. This will also be discussed in the next paragraph.

### **Propositions for further research**

This project has been performed within a restricted time span. For that reason the project has been scoped to answering the project questions. The project has collected during this process new study topics that should be discussed as propositions for research.

*Case study research:* A case study research could further validate the contribution and use of the tool in ITO arrangements. Recommended is to evaluate at least five ITO case studies in all phases of the outsourcing process (OLM). Another very interesting aspect that is recommended to be studied is the evaluation of the ITO cases that are (known to be) less successful. A new study should evaluate case studies and present findings based on the diagnostic tool. What could have been prevented and what is the learning for new ITO cases? The ISFA tool certainly provides the method to evaluate these cases.

*Outsourcing assessment:* The ISFA tool should be available for assessing any type of outsourcing, certainly considering the forecasted BPO growth. The application of the diagnostic tool should be further researched to provide a generic Outsourcing Success Assessment tool. BPO case studies should be used to validate the project success factor list for generic use.

### **Recommendations for practitioners**

The results of this project have revealed that the assessment of new, running and even closed ITO cases provide large opportunities. The evaluation of ITO cases contributes to the success of these arrangements. The developed ISFA tool opens and clarifies the discussion on expectations of ITO success. The assessment will provide insight in the ITO relation expectations and check alignment in the sourcing team itself. The alignment discussions that should have taken place are by the use of the ISFA tool reinitiated. Dare to learn from failures, because it will at the end

provide the competitive advantage of ITO. The steps following the ISFA are very important. The follow up on the results is the responsibility of the assessor(s). Be aware that if the results strongly vary between the assessed organizations that this is reflecting the evaluation of the relation. Final part of the report is a brief summary of the recommendations for practitioners.

*Continuous evaluation of the outsourcing relation (Supplier Relation Management)* During an ITO arrangement the assessment should be performed frequently, preferably in each phase of the OLM process. Different evaluation results are expected in the outsourcing process. The integration of the ISFA tool in (IT) outsourcing relation management processes is recommended. Managing outsourcing relations involves skilled supplier relation management where success of the relation and the success factors contribution are frequently monitored and managed.

*Multilateral thinking:* The ISFA tool evaluates ITO success factors from a relation perspective. The unilateral way of thinking has been transformed in a multilateral evaluation process. The expectations of involved organizations in an ITO arrangement will be aligned based on their willingness to collaborate in order to achieve success. The objectives of ITO should always be aligned with the business goals. Use the assessment to clarify the expectations of ITO from a business perspective. In case the assessment provides a different view, a discussion should take place. The ISFA tool has provided an essential element in preparing and evaluating ITO success. The actions that result of the assessment have to be followed up to achieve a successful ITO arrangement.

*Early stage assessment:* the diagnostic tool should be integrated as a required part in an early stage of the outsourcing process. It is strongly recommended to adopt the ISFA tool in the Architect phase to perform an early stage assessment. The assessment prevents a possible cultural misalignment between organizations on success factors before even entering an ITO relation. This is strongly recommended and related to 'soft' success factors that determine a cultural fit in a relation from e.g. a trust perspective. Besides this the platforms used for electronic tendering should adopt the tool as a template for diagnostic use. The invited outsource organizations are in this set up required to respond to this assessment as essential part of a tender or selection process.

*Learning why ITO leads to problems:* ITO case assessment should provide insight in failures or potential disappointments. Learning from failures will at the end provide better results in future cases, 'willing to learn means capable to grow'.

The answer to the subtitle of the report will be the final discussion:

*'Is cost the factor that makes an ITO contract successful?'*

Cost is stated to be one of the most important reasons to opt for outsourcing. When analyzing cost in terms of success factors it is considered to be of least importance. The project analysis has provided a complete different view on cost. The performance results of ITO arrangements are in common defined in money (e.g. dollars). This results in practice that cost, used for ITO performance presentation, is very often interpreted as an important success factor. The interpretation of cost as a success factor is not correct from this perspective and therefore stated not to be the factor that makes ITO contracts successful. Doing the right things & doing things right: cost should in this context be considered as an outcome that is based on (defined success) conditions!

## Annexes

### Annex A: Literature

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Buining Architectuur	<a href="http://www.buiningarchitectuur.nl">http://www.buiningarchitectuur.nl</a>	Logo design
Gartner	<a href="http://www.gartner.com">http://www.gartner.com</a>	Dataquest
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Giarte	<a href="http://www.giarte.com">http://www.giarte.com</a>	Benchmark
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NEVI, 2000	Outsourcing, Nevi, CDROM, 2000 <a href="http://www.nevi.nl">http://www.nevi.nl</a>	Nederlandse Vereniging Voor Inkoopmanagement
Outsourcing Institute	<a href="http://www.outsourcinginstitute.com">http://www.outsourcinginstitute.com</a>	
Philips	<a href="http://www.philips.com">http://www.philips.com</a>	Employer
Van Weele	<a href="http://www.arjanvanweele.com">http://www.arjanvanweele.com</a>	Professor/supervisor
Wikipedia	<a href="http://www.wikipedia.org">http://www.wikipedia.org</a>	Encyclopaedia



## **Annex B: Global organization profile Philips**

Source [www.philips.com](http://www.philips.com) March 19 2007

Royal Philips Electronics of the Netherlands is a global leader in healthcare, lifestyle and technology, delivering products, services and solutions through the brand promise of "sense and simplicity". Headquartered in the Netherlands, Philips employs approximately 121,700 employees in more than 60 countries worldwide. With sales of EUR 27.0 billion in 2006, the organization is a market leader in medical diagnostic imaging and patient monitoring systems, energy efficient lighting solutions, personal care and home appliances, as well as consumer electronics.

80,000 registered patents illustrate the innovative nature of the organization. In a world in which technology increasingly touches every aspect of daily life, we want to bring 'sense & simplicity' to consumers with advanced, easy to use products that are designed specifically to meet their needs, wherever in the world they may be.

### **Healthcare**

We combine our expertise in medical technology with the clinical know-how of our customers to produce innovative solutions that meet not just the needs of individual patients, but which also enable healthcare professionals to work faster, more easily and more cost-effectively. Our medical customers have ranked us number 1 in cardiovascular X-ray, digital X-ray and ultrasound, patient monitoring systems, nuclear medicine, cardiology systems and critical care systems. Key products: Brilliance CT scanners, Panorama MR, iU22.

### **Lifestyle**

We believe that every moment you spend at home (or away from work) should be enjoyable and uncomplicated: time spent recharging your batteries or simply enjoying yourself. That's why we continue to develop products designed to help make your life simpler and more relaxing, whether you're watching TV, adjusting the lighting in your bedroom, cleaning your teeth, listening to music or simply making your coffee in the morning. Key products: Voice over Internet Protocol phones, Wireless Music Centre, Smart Touch XL, Ambilight TV.

### **Technology**

Technology is the driving force of our Healthcare and Lifestyle products. And in today's world, in which increasingly more aspects of our lives are being enabled by technology, it is the continuing Philips tradition of innovation that will enable us to provide the solutions that realize the full potential of fast-evolving digital technologies.

On September 29, 2006, Philips completed the sale of 80.1% of its Semiconductors business to a consortium of private equity partners, founding the newly independent semiconductors organization NXP. Philips retains a 19.9% stake in NXP.

### Annex C: Interview questionnaire

The selection of experts has been made from organizations with extensive experience in ITO arrangements. For practical reasons has been chosen to approach experts, that are located in the Netherlands. The following interview guide has been used as the basis for the semi-structured interviews, conducted at the organizations which participated in the research. This is in fact a fairly open framework with open, broad questions, which allows for more conversational, two-way communication in which new questions are allowed to arise. The interview in this style is planned for about one and a half to two hours in average. All interviews have been conducted based on the questionnaire and if possible conducted in native language (Dutch).

Type		Question
General Questions 15 minutes	Organization	<p>Note: Information preparation before the interview, the introduction starts with up to date organization information provided by the interviewer. The organization questions are intended to start the interview with and should not take longer than fifteen minutes.</p> <p>Could you please give an introduction of the organization you work for? E.g. organization, number of employees, turnover, market, core activities etc.</p>
	Outsourcing department	How many people in your department are involved in outsourcing? Other topics: organization, number of employees, turnover, market, core activities etc.
		What is the organization/department strategy regarding ITO?
		What are the trends in (IT) outsourcing?
	What are the developments in (IT) outsourcing?	
Questions related to ITO (WHY) 30 minutes	IT	What differentiations within IT do you define? How is this taken into account in ITO contracts?
	ITO	What are the differentiations in ITO?
		What is your (organization's) definition of (IT) outsourcing?
		What are the key objectives for ITO?

Type		Question
		What are the risks of ITO?
<p>Questions related to Success Factor of ITO (WHAT)</p> <p>30 minutes</p>	Factors	What are according to your organization/department the success factors for ITO contracts?
		What are your organization's definitions of these three factors? Note: A selection is presented of three factors from the question above (factors list available).
		Does the differentiation in IT influence the discussed success factors?
	Evaluation models	Does your organization use or advice performance evaluation models?
		Can you provide information of the models used for performance evaluation of ITO contracts?
		Do you or your team review ITO contracts? What frequency is used for this review?
<p>Practices (HOW)</p> <p>15 minutes</p>	Results	What is the best example of an ITO contract? Why has it been successful?
		What is the worst example of an ITO contract? Why has it been less successful?
	Terms	What were the conditions of these ITO contracts: time, innovation and flexibility?
		(Optional) What are the most important advantages of (IT) outsourcing from best practice?
Any other questions	Other	Any other questions you would have expected related to this topic?

## Annex D: Interviewed organizations

Company	Function
<b>Advisory (consultancy)</b>	
Atos Consulting	Partner Trends institute
Hackett Group	Director Netherlands
Kirkman Company	Senior Consultant
<b>Outsource organization (supplier)</b>	
IBM	Global BPO manager
EDS	Sales manager Benelux
Getronics Pink	Executive board member
<b>Source organization (customer)</b>	
Airtrade	CIO
KPN	CPO
ING	Sourcing manager
Philips	CEO Business Applications
Philips	SVP Supply Management
Philips	VP IT operations

## Annex E: ITO success factors

Forty-five ITO success factors have been clustered, for practical reasons, in eleven competences. The performed analysis has been aligned with the competences of the revised project framework. The methodology that has been used is the grounded theory approach (Strauss and Corbin, 1998). The provided ranking, (1) very important to (11) less important, has been validated for the Architect phase of the Outsource Lifecycle Model (OLM).

### 1) Organization competences

- *Governance*: the separate process or certain part of management or leadership processes that makes decisions that define expectations, grant power, or verify performance. For example the Decision Making Unit within an organization, the way of working, processes, who is involved in what action
- *Management involvement*: secure decision making and business-IT strategy alignment by early involvement of the organization management
- *Core competence management*: alignment of the organization's activities and competences those are relevant for the business objectives. Develop the core activities of the organization to increase the business results
- *Maturity*: IT organization with a clear governance, skilled people, structured infra and a transparent budget for the IT activities

### 2) Strategy

- *IT Strategy*: definition of the long term plan of actions within IT. This reflects all IT related activities in the organization, including ITO. A strategy is a long term plan of action designed to achieve a particular objective, most often "winning"
- *Sourcing strategy*: definition of the long term plan of actions of the sourcing process, what should be achieved in the future and what will be the plan towards this objective. Specific for this project are ITO related objectives
- *Business strategy*: the long term plan of actions designed to achieve business objectives and the clear definition of these objectives
- *IT-business linkage*: alignment of the IT strategy with the Business strategy, the ITO arrangement should contribute to the business
- *Clear ITO scope*: know what IT to outsource, perform a maturity assessment for the selection of IT to be outsourced. For example IT services that are commodity, non core competence and mature

### 3) ITO process

- *Communication*: qualitative and frequent communication of relevant information with and to all parties involved or affected. For example with the employees, HR department, the Decision Making Unit, the project teams of both supplier and customer involved in the ITO relation
- *Multidisciplinary team*: a team covering thorough ITO expertise, IT experts, the Decision Making Unit, stakeholders of the involved organizations and purchasing expertise for managing the tender process
- *Human resource management*: if employees are transferred from the customer to the supplier in the ITO arrangement, involve from the beginning Human Resource management and if applicable the Workers Council in the ITO process. Discussions on employee transfer are very important in ITO arrangements
- *Expectations management*: manage in any phase of the ITO arrangement expectations and perceptions of all involved or affected. This will prevent a disconnect on what has been expected versus achieved
- *People*: manage the people in the ITO, communicate about the new situation, involve people in the process, train for the new way of working, prepare for new roles and responsibilities, etc.
- *Tender process*: manage the tender process to generate competing and qualitative offers from different suppliers. This is could be for example a request for information, a proposal

and a quotation. The tender should be based on the IT and business requirements, that have been collected by the multidisciplinary team

#### 4) Stakeholder

- *Aligned stakeholder*: communication with and between people that are affected or affect the ITO. Examples of stakeholders are customers, employees, shareholders and investors. The alignment of stakes will prevent a discussion on what at the end has been expected and achieved
- *Stakeholder selection*: involvement of stakeholders depends on the intent of the contribution. The selection could be based on the organizational ITO impact and their contribution to the ITO process
- *Shareholder value*: take into account the influence of the shareholders value on the ITO decision

#### 5) Risk

- *Risk analysis*: assessing aspects that could have a negative impact on an ITO arrangement. The risks addressed in the ITO assessment should be evaluated and addressed for management
- *Risk management*: manage the identified risks in a structured way that reduces and provides insight on the probability of their occurrence. Manage the process of (un) identified risks continuously, not taking into account risks will increase the ITO failure probability

#### 6) Preparation

- *Clear objectives*: perform a business assessment to find out what the ITO objectives are. Ensure that the outcome of the assessment is independent of the performing organization. Be aware of the assessment perspectives, e.g. IT organization+, business, investor and stakeholder perspectives (Strategic, Tactical and Operational)
- *Professionalism*: garbage in garbage out concept, professionalize the IT services and processes before considering ITO. Structuring the organization before ITO helps defining objectives and benefits

#### 7) ITO Supplier

- *Supplier selection*: investigation of supply base on experience and expertise. The known ITO suppliers and new ITO suppliers have to be assessed on capabilities, knowledge, financial status, experience, flexibility, etc., to come to a sourcing list
- *Mature supplier(s)*: suppliers that have proven to be successful in the ITO market, long enough to deliver services at high quality and acceptable cost. Preference is that the supplier has the competences and materials to provide ITO services and will not be dependant on single customer business
- *Multi supplier approach*: more than one supplier has the potential to deliver the ITO services at preferably equal quality and cost, to be able to prevent monopolistic behaviour and losing control of the relationship
- *Capacity*: quantitative and qualitative resources that are available for the specific ITO arrangement from a supplier perspective
- *Demand versus supply*: in case the total market demand is higher than the supply, make sure that supplier will only provide services that its capable of to prevent over promise and under perform
- *Supplier flexibility*: the supplier deals with additional requests of the customer and provides extra capacity or knowledge if requested at reasonable cost

#### 8) Knowledge

- *IT knowledge*: IT is often considered as a black box, due to lack of IT knowledge. In-house IT competence is likely to disappear in a ITO, always remain certain expertise of IT to be able to discuss the content of services

- *Market knowledge*: IT and ITO market knowledge contributes to the independency in an ITO relationship, remain and develop technology roadmap and commercial market knowledge within the retaining organization

## 9) Relationship

- *Continuous relation management*: manage the contract in stead of the people. This will be the new challenge for the retaining (customer) organization. Managing a relation or contract requires different skills compared to managing IT services operations
- *Customer flexibility*: the customer is capable to adopt new ways of working, processes and management
- *Supplier management*: find out in an easy way what the supplier is doing, stay in control of the relation and communicate frequently. Build a relation based on mutual trust
- *Labour demarcation*: implement a strict division of what the supplier resources will do and what the customers resources do
- *Social exchange*: enable a social and economic outcome of the ITO relation to create a win-win arrangement. Be prepared to share knowledge in the ITO relation
- *Positioning of the relation*: the customer stays in control of the ITO relation. The supplier providing ITO services should not be able to create a position, in which it can pursue enormous cost rises
- *IT management*: manage the ITO arrangement as if it would be the organization's core business to gain maximum performance

## 10) Contract

- *Contract*: take the time to come to a very well documented agreement. The agreement should encourage opportunities to come to a win-win situation. The agreement should be stimulating both parties in obtaining the benefits. Explicitly define the conditions for the arrangement and the impact of additional requirements to be able to manage the cost
- *Contract term*: Start with a initial short term contract e.g. of 3 year, based on one year renewals, with the intention to extend if it is successful
- *Contract management*: define a clear management model for the arrangement. The contract manager should be involved in the complete OLM process and remain responsible, to achieve the benefits of the arrangement. This holds for both supplier and customer. An opportunity would be the transfer of a supplier key person in the arrangement process to the customer, responsible for managing his/her offered proposal
- *Bonuses*: a bonus as part of the agreement could help keep the supplier motivated to meet customer objectives, for example a business increase related bonus which can be linked to the performance of the ITO arrangement
- *Penalties*: internal penalties for securing the customer organization commitment, to ensure maximal contribution to the ITO relationship to meet the expectations

## 11) Cost

- *Cost of services*: the reduction of total cost by the ITO services of the supplier with defined long term expectations. The costs are managed by both the customer and the supplier organization (Total Cost of Ownership concept or TCO)
- *Transaction cost*: minimize the cost of the transition of the ITO arrangement. This includes the tender cost, change management, implementation, employee transfer, etc.
- *Cost transparency*: the transparency of cost of the ITO services from the supplier, provide a clear and detailed cost breakdown of the services. The costs are managed by both the customer and the supplier organization (TCO)

## **Annex F: Dell lost Philips ITO case**

### **Dell to Deliver Global Managed Services to Philips**

Source: Gartner

On 22 February 2006, Philips confirmed press reports that a 75,000-seat desktop outsourcing deal with Dell had been terminated in December 2005.

This deal originally was announced in December 2004, when Dell signed a five-year contract with Philips to provide desktop and laptop hardware and help desk and desktop services for 75,000 desktops in 60 countries. Dell was the prime contractor, with Getronics and Atos Origin as service partners.

Though the deal has been terminated, Dell will continue to be a major supplier of customer systems to Philips. Neither Philips nor Dell has said why the deal was terminated, but Gartner's experience is that large-scale deals like this are inherently complex to manage for both service provider and service recipient. Philips is one of world's biggest electronics organizations, with more than 60 businesses in areas as diverse as medical systems, domestic appliances, consumer electronics, lighting and semiconductors. Our view is that introducing a standardized approach to the desktop environment across such a diverse business was always going to be challenging for Philips and its service partners. Securing initial deal buy-in and operationalizing the approach during the course of an agreement are quite different challenges. Any delay in uptake would clearly have an impact on the achievement of project milestones as well as on anticipated business benefits. We do not believe the failure of this deal reflects on Dell's technical ability to manage large-scale, complex deals.

Dell is successfully managing large-scale desktop portfolios for customers such as AXA and Boeing. However, this news could harm Dell's image among some customers and prospects, which may question Dell's ability to understand and respond to a customer's political and cultural issues, as well as its IT issues. Managing multiple stakeholders in complex deals is an increasingly critical task in the larger effort of ensuring the successful implementation of large-scale projects. We recommend that businesses use a structured framework, such as Gartner's co-management framework, to ensure full and complete engagement by service provider and service recipient.

Recommendation: Businesses planning large-scale service agreements should create a structured model to ensure full engagement with internal and external stakeholders. Use this model to measure the degree of all stakeholders' ongoing engagement.

#### **About Dell**

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Original article:

[http://www.gartner.com/resources/138200/138206/large\\_deal\\_complexity\\_sinks\\_\\_138206.pdf](http://www.gartner.com/resources/138200/138206/large_deal_complexity_sinks__138206.pdf)



## Annex G: Spearman's rank correlation coefficient

Spearman's rank correlation coefficient is a test for correlation between sequences of pairs of values. Using ranks eliminates the sensitivity of the correlation test to the function linking the pairs of values. In particular, the standard correlation test is used to find linear relations between test pairs, but the rank correlation test is not restricted in this way. Given the pairs of observations, the items are assigned a rank value and, separately, the items are assigned a rank. For each pair, the corresponding difference, between the rank value and rank is found.

More detailed information including formulas is available at:

[http://en.wikipedia.org/wiki/Spearman's\\_rank\\_correlation\\_coefficient](http://en.wikipedia.org/wiki/Spearman's_rank_correlation_coefficient)

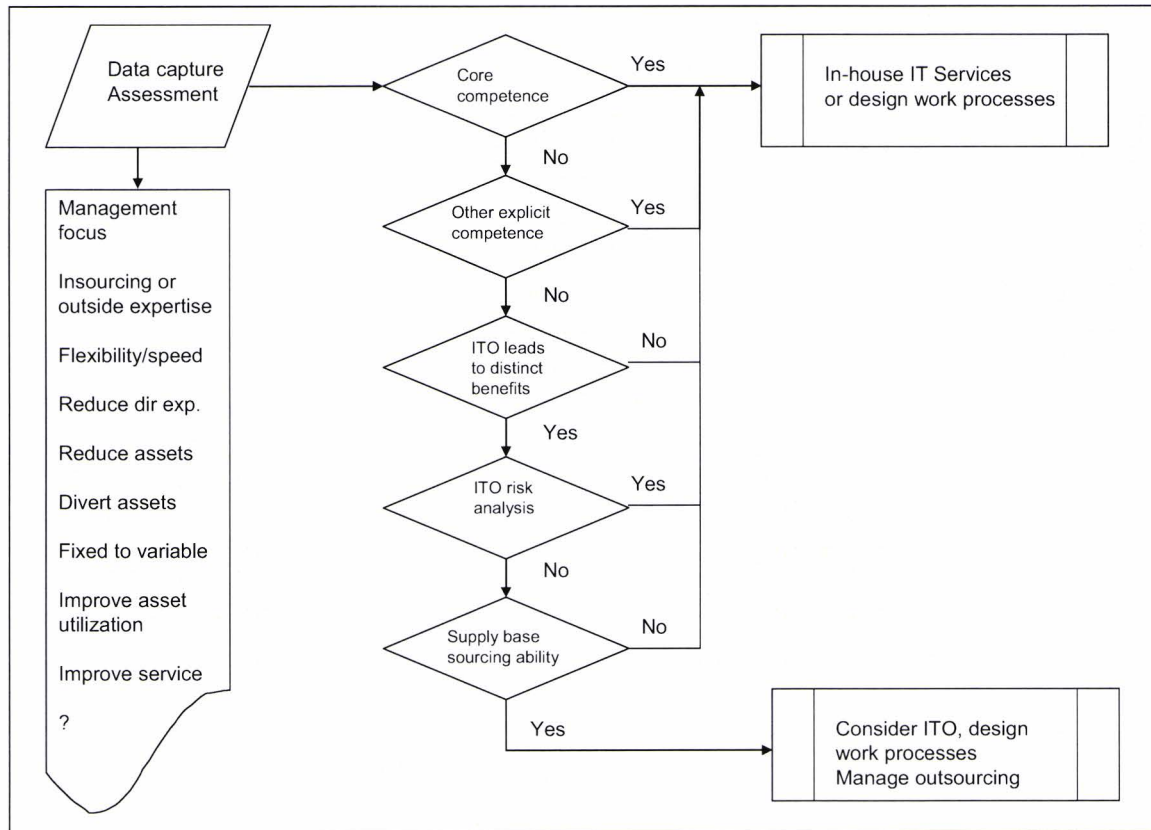
**Table 9. Critical Values of Spearman's Rank Correlation Coefficient.**

The  $\alpha$  values correspond to a one-tailed test of  $H_0 : \rho_s = 0$ . The value should be doubled for two-tailed tests.

$n$	$\alpha = .05$	$\alpha = .025$	$\alpha = .01$	$\alpha = .005$	$n$	$\alpha = .05$	$\alpha = .025$	$\alpha = .01$	$\alpha = .005$
5	.900				18	.399	.476	.564	.625
6	.829	.886	.943		19	.388	.462	.549	.608
7	.714	.786	.893		20	.377	.450	.534	.591
8	.643	.738	.833	.881	21	.368	.438	.521	.576
9	.600	.683	.783	.833	22	.359	.428	.508	.562
10	.564	.648	.745	.794	23	.351	.418	.496	.549
11	.523	.623	.736	.818	24	.343	.409	.485	.537
12	.497	.591	.703	.780	25	.336	.400	.475	.526
13	.475	.566	.673	.745	26	.329	.392	.465	.515
14	.457	.545	.646	.716	27	.323	.385	.456	.505
15	.441	.525	.623	.689	28	.317	.377	.448	.496
16	.425	.507	.601	.666	29	.311	.370	.440	.487
17	.412	.490	.582	.645	30	.305	.364	.432	.478

## Annex H: Outsourcing evaluation example

Source (adapted to ITO from original): CPO of KPN



## Annex I: ISFA evaluation sheet

### ITO Success Factor Assessment (ISFA) evaluation sheet (Wennink, 2007)

Success factors	Evaluation <i>Ranking 0-10 with 0: not applicable to 10: very important</i>	Definition
<b>Contractual</b>		
Contract		Take the time to come to a very well documented agreement. The agreement should encourage opportunities to come to a win-win situation. The agreement should be stimulating both parties in obtaining benefits.
Contract term		Explicitly define the conditions for the deal and the impact of additional requirements to be able to manage
Contract management		Start with a initial short term contract e.g. of 3 year (1 year with renewals), with the intention if successful to An agreed clear contract management model for the arrangement. The contract manager should stay in the lead, achieving benefits of the contract. This holds for both supplier and customer. Opportunity would be the transfer of a supplier employee to the customer, in a role of managing his/her own proposal
Bonuses		Bonus as part of the agreement could help keep the supplier motivated to meet customer objectives, for example a business increase related bonus which can be linked to the performance of the ITO arrangement
Penalties		Internal penalties for securing the customer organization commitment, to ensure maximal contribution to the ITO relationship to meet the expectations
<b>Knowledge</b>		
IT knowledge		IT is often considered as a black box, due to lack of IT knowledge. In-house IT competence is likely to disappear in a ITO, always remain certain expertise of IT to be able to discuss the content of services
Market knowledge		IT and ITO market knowledge contributes to the independency in an ITO relationship, remain and develop technology roadmap and commercial market knowledge within the retaining organization
<b>Risk</b>		
Risk analysis		Assessing aspects that could have a negative impact (risk) on an ITO arrangement. The risks addressed in the ITO assessment should be evaluated and marked for management
Risk management		Handle the marked risks in a structured way that reduces and provides insight on the probability of occurrence. Manage the process of (un)identified risks continuously, not taking into account risks will enlarge
<b>Cost</b>		
Cost of services		Reduction of costs of the ITO services from the supplier with defined long term expectations. The costs are managed by both the customer and the supplier organization (Total Cost of Ownership)
Transaction cost		Minimize the costs for the transition or implementation of the ITO arrangement. This includes the tender cost, change management, implementation, employee transfer, etc.
Cost transparency		Transparency of costs of the ITO services from the supplier, a clear and detailed cost breakdown of the services. The costs are managed by both the customer and the supplier organization (TCO)
<b>ITO supplier</b>		
Supplier selection		Research on supply base of experience and expertise. The known ITO suppliers and new ITO suppliers are assessed on capabilities, financial status, experience, flexibility, etc. to come to a sourcing list
Mature suppliers		Suppliers that have proven to be successful in the ITO market, long enough to deliver services at high quality and acceptable cost. Preference is that the supplier has the competences and materials to provide ITO services and will not be dependant on single customer business
Multi supplier approach		More than one supplier has the potential to deliver the ITO services at preferably equal quality and cost, to be able to prevent monopolistic behaviour and losing control of the relationship
Supplier capacity		Quantitative and qualitative pool of resources that are available and committed to the ITO arrangement from a
Demand and supply		In case the market demand is higher than the supply, the supplier will only offer services that its capable of to prevent over promise and under perform
Supplier flexibility		The supplier willingness to deal with additional requests from the customer and provides extra capacity or knowledge if requested at reasonable cost
<b>Organization competence</b>		
Governance		The separate process or certain part of management processes that makes decisions that: define expectations, grant power, or verify performance. For example the Decision Making Unit within an organization, the way of working, processes, who is involved in what action.
Management involvement		Secure decision making and business-IT strategy alignment by early involvement of the organizations
Core competence management		Alignment of the organization's activities and competencies that are relevant for the business objectives. Development the core activities of the organization to increase business results
Organization maturity		An (IT) organization with a clear governance, skilled people, structured infra and a transparent budget for the
<b>Strategy</b>		
IT strategy		Definition of the long term plan of actions within IT. This reflects all IT related activities in the organization, including ITO. A strategy is a long term plan of action designed to achieve a particular objective, most often
Sourcing strategy		Definition of the long term plan of actions of the sourcing process, what should be achieved in the future and what will be the plan towards this objective. Specific for this project are ITO related objectives
Business strategy		The long term plan of actions defined to achieve the business objectives and the definition of these objectives
IT-business linkage		Alignment of the IT strategy with the Business strategy, an ITO arrangement should contribute to the business
Clear ITO scope		Know what IT to outsource, perform a maturity assessment for the selection of IT to be outsourced. For example IT services that are commodity, non core competence and mature

<b>Preparation</b>	
Clear objectives	The objectives for ITO are clearly defined, via e.g. a business assessment. Know why to outsource, the outcome of the assessment should be independent of the performing organization (IT organization, business, investor and stakeholder perspectives)
Professionalism	Garbage in garbage out concept, professionalize the IT services and processes before considering ITO. Structure the organization before ITO helps defining objectives and benefits

<b>ITO process</b>	
Communication	Qualitative and frequent communication of relevant information of the ITO process to all parties directly involved/affected. For example the affected employees, HR department, the Decision Making Unit, the project teams of both supplier and customer involved in the ITO relation
Multidisciplinary team	A team covering thorough ITO expertise, IT experts, the Decision Making Unit, stakeholders of the involved organizations and purchasing for managing the tender process
Human resource management	Early HRM involvement if employees are transferred from the customer to the supplier in the ITO arrangement and if applicable the Workers Council in the ITO process
Expectations management	In any phase of the ITO arrangement managing expectations and perceptions of all involved or affected. This will prevent a disconnect on what has been expected versus achieved
People	Manage the people in the ITO, communicate about the new situation, involve people in the process, train for the new way of working, new roles and responsibilities, etc.
Tender process	Manage a process to generate competing and qualitative offers from different suppliers. This is could be e.g. request for information, a proposal and a quotation. The tender is based on the IT/business requirements, composed by the multidisciplinary team

<b>Relationship</b>	
Continuous relation management	Manage the ITO contract in stead of an IT organization will be a challenge for the retaining sourcing organization. Managing a supplier relation based on a ITO contract requires different skills compared to managing e.g. IT services operations
Customer flexibility	The customer organization is capable to adopt new ways of working, processes and management which are required by a ITO contract
Supplier management	Find out in an easy way what the supplier is actually doing and performing, stay in control of the relation and communicate on a frequent base at agreed different levels (strategic, tactical and operational) with the ITO
Labour demarcation	Implement a strict division of what the supplier resources will do and what the customer resources do
Social exchange	Enable a social and economic outcome of the ITO relation that will lead to optimal performance at both parties, in other words create a win-win arrangement
Strategic positioning	The customer stays in control of the ITO relation, the supplier providing ITO services should not be able to create a position, in which it can pursue enormous cost rises
ITO management	Manage the ITO arrangement as if it would be the organization's core business to gain maximum

<b>Stakeholder</b>	
Aligned stakeholder	Communication and consensus with stakeholders that are affected or affect the ITO. Examples of stakeholders are customers, employees, shareholders and investors.
Stakeholder selection	Involvement of stakeholders depends on the intent of their contribution. The selection could be based on the organizational ITO impact and the importance of their contribution to the ITO process
Shareholder value	Take into account the relation or influence of the shareholders' value versus the ITO decision

**Annex J: ISFA process flow chart**

